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ABSTRACT

This document is intended to help health educators prepare for certification as a certified health education specialist (CHES). The study guide begins with a brief introduction and a self-assessment instrument that allows individuals to evaluate their skill in 27 competencies related to the following generic areas of responsibility in which CHES are expected to demonstrate competence: (1) assessing individual and community needs for health education; (2) planning effective health education programs; (3) implementing health education programs; (4) evaluating the effectiveness of health education programs; (5) coordinating provision of health education services; (6) acting as a resource person in health education; and (7) communicating health and health education needs, concerns, and resources. Chapters 1-7 each examine one of the generic areas of responsibility. Each chapter contains some or all of the following items: a discussion of the nature and purpose of the specific responsibility; examples of execution of the specific responsibility in community, health care, school, and workplace settings; definitions of key terms; and definitions of related competencies and guidelines for developing and demonstrating them. The following items are appended: the code of ethics for the health education profession; information on construction of the health education specialist examination; and practice questions. (Contains 116 references.) (MN)

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The Health Education Specialist:

A Study Guide for Professional Competence

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THE NATIONAL COMMISSION FOR
HEALTH EDUCATION CREDENTIALING, INC.

THE HEALTH EDUCATION SPECIALIST:
A Study Guide for Professional Competence

■ *Fourth Edition* ■

Based on an original work by

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The use of this Study Guide is not a guarantee of successful completion of the Certified Health Education Specialist (CHES) examination. Please review the section 'How to Use This Book' for a description of the purpose of this

resource. Any expectation beyond the purpose stated in this section is solely the responsibility of the user and not that of The National Commission for Health Education Credentialing, Inc.

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TABLE OF CONTENTS

Acknowledgments	iv
How to Use This Book.....	v
Introduction	1
Self-Assessment	3
Chapter 1 - Assessing Individual and Community Needs for Health Education	11
Chapter 2 - Planning Effective Health Education Programs	21
Chapter 3 - Implementing Health Education Programs	37
Chapter 4 - Evaluating Effectiveness of Health Education Programs.....	47
Chapter 5 - Coordinating Provision of Health Education Services	63
Chapter 6 - Acting as a Resource Person in Health Education.....	73
Chapter 7 - Communicating Health and Health Education Needs, Concerns, and Resources.....	89
Appendix A - Code of Ethics for the Health Education Profession	111
Appendix B - Construction of the Health Education Specialist Examination..	118
Appendix C - Practice Questions.....	119
Bibliography	145

CKNOWLEDGMENTS

In 1992, Sigrid G. Deeds, DrPH, CHES, authored the original edition of *The Health Education Specialist: A Self-Study Guide for Professional Competence*. Her work was based on 25 years experience in a variety of health education settings. In 1995, Dr. Deeds donated her book to the National Commission for Health Education Credentialing, Inc.

This fourth edition marks the third revision to Dr. Deed's original work. Previous revisions were prepared by Michael Cleary, EdD, CHES, Brad Neiger, PhD, CHES, and Kathleen Middleton, MS, CHES.

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HOW TO USE THIS BOOK

The purpose of this book is to guide your study as you strengthen your skills in and knowledge of the processes of health education and add to your proficiency and professionalism. It is specifically designed to assist in your preparation to certify as a Health Education Specialist.

The Study Guide can be used by both groups and individuals preparing for the CHES examination. Individually, you will want to use the Self-Assessment located in the Introduction as a starting point to assist in identifying areas where you have gaps in your preparation for health education practice. Following this self-assessment you will want to review the entire Study Guide to note additional areas that may need attention.

Certified Health Education Specialists (CHES) who used the Study Guide to prepare for the certification examination tell us that using this book as the basis for a study group seemed to be very helpful. Working through the practice questions, using a discussion format has been suggested as a useful way to prepare for the exam.

This fourth edition was prepared in response to suggestions for improvement made by those who have used past editions of the Study Guide. To this end, more practice questions have been added and are presented as one appendix at the end of the book. The binding has been changed to allow for easier use, and more "white" space has been provided for note taking throughout the book. *The Self-Assessment for Health Educators - Perceived Competence* has been included, as it had been in the original work, to assist you in determining your own professional strengths and weaknesses.

The text in each chapter has been organized to follow the seven generic areas of responsibility and the 27 related competencies as delineated in *A Competency-Based Framework for Professional Development of Certified Health Education Specialists*. The *Framework* was the result of the initial Role Delineation Project completed in 1981 that identified and verified, for the first time, the generic entry-level skills necessary for the practice of health education in all settings. Each chapter begins with the Responsibility, followed by the role of the health educator relative to the Responsibility, with examples of the role in each practice setting from the *Framework*, key terms, and information germane to each of the corresponding competencies.

The content of this publication reflects broad consensus about a common core of professional preparation leading to entry-level practice as a health educator. This publication should not be used in place of original sources, but rather as a tool to identify areas of practice you may need to study further.

In addition to using this Study Guide in preparing for certification, the Study Guide may be of value in addressing professional development needs. Students in professional preparation programs may find the format and organization of information in the Study Guide a useful adjunct to their textbooks, class lectures, and as a reference tool.

INTRODUCTION

The Self-Assessment for Health Educators - Perceived Competence is presented in this introductory chapter. This assessment tool is designed to assist you in identifying your strengths and weaknesses. With this information, you may better design a study strategy for the certification examination in health education and to meet continuing education needs.

When using *The Self-Assessment for Health Educators - Perceived Competence*, you are asked to indicate the level of competence you feel in a particular skill area. The skills addressed represent those identified by the National Commission for Health Education Credentialing, Inc, as essential for the generic, entry level health educator no matter what the work setting. The skills emanate from the seven areas of responsibility and their related competencies which appear in *A Framework for the Development of Competency-Based Curricula for Entry Level Health Educators*. The areas of responsibility are 1) Assessing individual and community needs for health education; 2) Planning effective health education programs; 3) Implementing health education programs; 4) Evaluating effectiveness of health education programs; 5) Coordinating provision of health education services; 6) Acting as a resource person in health education; 7) Communicating health and health education needs, concerns and resources.

To Use the Self-Assessment: Read each statement and circle the number that corresponds to your competence level. You are assessing the extent to which you believe you are capable of performing the skill as described in each of the sub-competencies. The responses force you to make a determination of competence or non-competence. Be honest with yourself.

When you have completed the Self-Assessment, review your responses looking for those sub-competencies where you scored 1 or 2, indicating less competence. These are the skills that you may want to pay more attention to while preparing for the examination. This assessment is by no means meant to be a prescription for successful performance on the certification examination. It is merely a tool designed to assist you in your preparation.

SELF-ASSESSMENT FOR HEALTH EDUCATORS

Perceived Competence

The competency statements you are asked to respond to in this assessment describe the broadly defined skills that a qualified entry-level, generic health educator is expected to be able to demonstrate at least at minimum levels.

To assess your individual skill level for each competency statement you are asked to rate each competency from 1 to 4, with 1 indicating you do not feel competent in that skill area to 4 that you feel very competent in that skill.

not				very
competent				competent
1	2	3	4	

SELF-ASSESSMENT FOR HEALTH EDUCATORS

Responsibility I:

The health educator, working with individuals, groups, and organizations is responsible for:

ASSESSING INDIVIDUAL AND COMMUNITY NEEDS FOR HEALTH EDUCATION

The health educator can:

	not competent		very competent	
COMPETENCY A: Obtain health-related data about social and cultural environments, growth and development factors, needs, and interests.				
1. Select valid sources of information about health needs and information.	1	2	3	4
2. Utilize computerized sources of health-related information.	1	2	3	4
3. Employ or develop appropriate data-gathering information.	1	2	3	4
4. Apply survey techniques to acquire health data.	1	2	3	4
COMPETENCY B: Distinguish between behaviors that foster and those that hinder well-being.				
1. Investigate physical, social, emotional, and intellectual factors influencing health behaviors.	1	2	3	4
2. Identify behaviors that tend to promote or compromise health.	1	2	3	4
3. Recognize the role of learning and affective experiences in shaping patterns of health behavior.	1	2	3	4
COMPETENCY C: Infer needs for health education on the basis of obtained data.				
1. Examine needs assessment data.	1	2	3	4
2. Determine priority areas of need for health education.	1	2	3	4

Responsibility II:

The health educator, working with individuals, groups, and organizations is responsible for:

PLANNING EFFECTIVE HEALTH EDUCATION PROGRAMS

The health educator can:

<u>The health educator can:</u>	not competent		very competent	
COMPETENCY A: Recruit community organizations, resource people, and potential participants for support and assistance in program planning.				
1. Communicate need for the program to those whose cooperation will be essential.	1	2	3	4
2. Obtain commitments from personnel and decision makers who will be involved in the program.	1	2	3	4
3. Seek ideas and opinions of those who will affect or be affected by the program.	1	2	3	4
4. Incorporate feasible ideas and recommendations into the planning process.	1	2	3	4
COMPETENCY B: Develop a logical scope and sequence plan for a health education program.				
1. Determine the range of health information requisite to a given program of instruction.	1	2	3	4
2. Organize the subject areas comprising the scope of a program in logical sequence.	1	2	3	4
COMPETENCY C: Formulate appropriate and measurable program objectives.				
1. Infer educational objectives facilitative of achievement of specified competencies.	1	2	3	4
2. Develop a framework of broadly stated, operational objectives relevant to a proposed health education program.	1	2	3	4
COMPETENCY D: Design educational programs consistent with specified program objectives.				
1. Match proposed learning activities with those implicit in the stated objectives.	1	2	3	4
2. Formulate a wide variety of alternative educational methods.	1	2	3	4
3. Select strategies best suited to implementation of educational objectives in a given setting.	1	2	3	4
4. Plan a sequence of learning opportunities building upon and reinforcing mastery of preceding objectives.	1	2	3	4

Responsibility III:

The health educator, working with individuals, groups, and organizations is responsible for:

IMPLEMENTING HEALTH EDUCATION PROGRAMS

The health educator can:

not
competent very
competent

COMPETENCY A: Exhibit competence in carrying out
planned educational programs.

- | | | | | |
|--|---|---|---|---|
| 1. Employ a wide range of educational methods and techniques. | 1 | 2 | 3 | 4 |
| 2. Apply individual or group process methods as appropriate
to given learning situations. | 1 | 2 | 3 | 4 |
| 3. Utilize instructional equipment and other instructional media. | 1 | 2 | 3 | 4 |
| 4. Select methods that best facilitate practice of program objectives. | 1 | 2 | 3 | 4 |

COMPETENCY B: Infer enabling objectives as needed to implement
instructional programs in specified settings.

- | | | | | |
|--|---|---|---|---|
| 1. Pretest learners to ascertain present abilities and knowledge relative
to proposed program objectives. | 1 | 2 | 3 | 4 |
| 2. Develop subordinate measurable objectives as needed for instruction. | 1 | 2 | 3 | 4 |

COMPETENCY C: Select methods and media best suited to
implement program plans for specific learners.

- | | | | | |
|---|---|---|---|---|
| 1. Analyze learner characteristics, legal aspects, feasibility, and
other considerations influencing choices among methods. | 1 | 2 | 3 | 4 |
| 2. Evaluate the efficacy of alternative methods and techniques
capable of facilitating program objectives. | 1 | 2 | 3 | 4 |
| 3. Determine the availability of information, personnel, time,
and equipment needed to implement the program for a given audience. | 1 | 2 | 3 | 4 |

COMPETENCY D: Monitor educational programs, adjusting
objectives and activities as necessary.

- | | | | | |
|---|---|---|---|---|
| 1. Compare actual program activities with the stated objectives. | 1 | 2 | 3 | 4 |
| 2. Assess the relevance of existing program objectives to current needs. | 1 | 2 | 3 | 4 |
| 3. Revise program activities and objectives as necessitated by changes
in learner needs. | 1 | 2 | 3 | 4 |
| 4. Appraise applicability of resources and materials relative to given
educational objectives. | 1 | 2 | 3 | 4 |

Responsibility IV:

The health educator, working with individuals, groups, and organizations is responsible for:

EVALUATING EFFECTIVENESS OF HEALTH EDUCATION PROGRAMS

The health educator can:

<u>The health educator can:</u>	not competent		very competent	
COMPETENCY A: Develop plans to assess achievement of program objectives.				
1. Determine standards of performance to be applied as criteria of effectiveness.	1	2	3	4
2. Establish a realistic scope of evaluation efforts.	1	2	3	4
3. Develop an inventory of existing valid and reliable tests and survey instruments.	1	2	3	4
4. Select appropriate methods for evaluating program effectiveness.	1	2	3	4
COMPETENCY B: Carry out evaluation plans.				
1. Facilitate administration of the tests and activities specified in the plan.	1	2	3	4
2. Utilize data collecting methods appropriate to the objectives.	1	2	3	4
3. Analyze resulting evaluation data.	1	2	3	4
COMPETENCY C: Interpret results of program evaluation.				
1. Apply criteria of effectiveness to obtained results of a program.	1	2	3	4
2. Translate evaluation results into terms easily understood by others.	1	2	3	4
3. Report effectiveness of educational programs in achieving proposed objectives.	1	2	3	4
COMPETENCY D: Infer implications from findings for future program planning.				
1. Explore possible explanations for important evaluation findings.	1	2	3	4
2. Recommend strategies for implementing results of evaluation.	1	2	3	4

Responsibility V:

The health educator working with individuals, groups, and organizations is responsible for:

COORDINATING PROVISION OF HEALTH EDUCATION SERVICES

The health educator can:

<u>The health educator can:</u>	not competent		very competent	
COMPETENCY A: Develop a plan for coordinating health education services.				
1. Determine the extent of available health education services.	1	2	3	4
2. Match health education services to proposed program activities.	1	2	3	4
3. Identify gaps and overlaps in the provision of collaborative health services.	1	2	3	4
COMPETENCY B: Facilitate cooperation between and among levels of program personnel.				
1. Promote cooperation and feedback among personnel related to the program.	1	2	3	4
2. Apply various methods of conflict resolution as needed.	1	2	3	4
3. Analyze the role of health educator as liaison between program staff and outside groups and organizations.	1	2	3	4
COMPETENCY C: Formulate practical modes of collaboration among health agencies and organizations.				
1. Stimulate development of cooperation among personnel responsible for community health education programs.	1	2	3	4
2. Suggest approaches for integrating health education within existing health programs.	1	2	3	4
3. Develop plans for promoting collaborative efforts among health agencies and organizations with mutual interests.	1	2	3	4
COMPETENCY D: Organize inservice training for teachers, volunteers, and other interested personnel.				
1. Plan an operational, competency-oriented training program.	1	2	3	4
2. Utilize instructional resources that meet a variety of inservice training needs.	1	2	3	4
3. Demonstrate a wide range of strategies for conducting inservice training programs.	1	2	3	4

Responsibility VI:

The health educator, working with individuals, groups and organizations is responsible for:

ACTING AS A RESOURCE PERSON IN HEALTH EDUCATION

The health educator can:

not
competent very
competent

COMPETENCY A: Utilize computerized health information retrieval system effectively.

- | | | | | |
|--|---|---|---|---|
| 1. Match an information need with the appropriate retrieval system. | 1 | 2 | 3 | 4 |
| 2. Access principal online and other databased health information resources. | 1 | 2 | 3 | 4 |

COMPETENCY B: Establish effective consultative relationships with those requesting assistance in solving health-related problems.

- | | | | | |
|--|---|---|---|---|
| 1. Analyze parameters of effective consultative relationships. | 1 | 2 | 3 | 4 |
| 2. Describe special skills and abilities needed by health educators for consultation activities. | 1 | 2 | 3 | 4 |
| 3. Formulate a plan for providing consultation to other health professionals. | 1 | 2 | 3 | 4 |
| 4. Explain the process of marketing health education consultative services. | 1 | 2 | 3 | 4 |

COMPETENCY C: Interpret and respond to requests for health information.

- | | | | | |
|--|---|---|---|---|
| 1. Analyze general processes for identifying the information needed to satisfy a request. | 1 | 2 | 3 | 4 |
| 2. Employ a wide range of approaches in referring requesters to valid sources of health information. | 1 | 2 | 3 | 4 |

COMPETENCY D: Select effective educational resource materials for dissemination.

- | | | | | |
|--|---|---|---|---|
| 1. Assemble educational material of value to the health of individuals and community groups. | 1 | 2 | 3 | 4 |
| 2. Evaluate the worth and applicability of resource materials for given audiences. | 1 | 2 | 3 | 4 |
| 3. Apply various processes in the acquisition of resource materials. | 1 | 2 | 3 | 4 |
| 4. Compare different methods for distributing educational materials. | 1 | 2 | 3 | 4 |

Responsibility VII:

The health educator, working with individuals, groups, and organizations is responsible for:

COMMUNICATING HEALTH AND HEALTH EDUCATION NEEDS, CONCERNS, AND RESOURCES

The health educator can:

not
competent very
competent

COMPETENCY A: Interpret concepts, purposes, and theories of health education.

- | | | | | |
|--|---|---|---|---|
| 1. Evaluate the state-of-the-art of health education. | 1 | 2 | 3 | 4 |
| 2. Analyze the foundations of the discipline of health education. | 1 | 2 | 3 | 4 |
| 3. Describe major responsibilities of the health educator in the practice of health education. | 1 | 2 | 3 | 4 |

COMPETENCY B: Predict the impact of societal value systems on health education programs.

- | | | | | |
|---|---|---|---|---|
| 1. Investigate social forces causing opposing viewpoints regarding health education needs and concerns. | 1 | 2 | 3 | 4 |
| 2. Employ a wide range of strategies for dealing with controversial health issues. | 1 | 2 | 3 | 4 |

COMPETENCY C: Select a variety of communication methods and techniques in providing health information.

- | | | | | |
|---|---|---|---|---|
| 1. Utilize a wide range of techniques in communicating health and health education information and education. | 1 | 2 | 3 | 4 |
| 2. Demonstrate proficiency in communicating health information and health education needs. | 1 | 2 | 3 | 4 |

COMPETENCY D: Foster communication between health care providers and consumers.

- | | | | | |
|--|---|---|---|---|
| 1. Identify the significance and implications of health care providers' messages to consumers. | 1 | 2 | 3 | 4 |
| 2. Act as liaison between consumer groups and individuals, and health care provider organizations. | 1 | 2 | 3 | 4 |

*Responsibility I***ASSESSING INDIVIDUAL AND COMMUNITY
NEEDS FOR HEALTH EDUCATION**

The primary purpose of a needs assessment is to gather information to determine which, if any, health education activities are appropriate in a given setting. Needs may be basic, i.e., essential to the comfort and well being of every human being (food, water, warmth, oxygen, etc.), or indicators of a gap between conditions as they are and as they ought to be. Although the term "problem" is frequently used interchangeably with need, in health education, strictly speaking, they are different. A health problem is defined as a potential or real threat to physical or emotional well being, amelioration or removal of which is a need (National Commission for Health Education Credentialing, Inc. [NCHEC], 1996).

Needs assessment is the systematic, planned collection of information about the health knowledge, perceptions, attitudes, motivation and health practices of individuals or groups and the quality of the socioeconomic environment in which they live. Assessing need logically precedes program planning. It provides data that determines whether a health education program is justified and, if so, what the nature and emphasis ought to be (NCHEC, 1996).

Following are examples of how needs assessment is used in different practice settings:

Community Setting - The health educator in the community draws on many sources of current data such as health planning agencies, public health departments, census reports and interview data obtained from community leaders as well as from members of the target group. These data provide information about felt health needs. If specific behaviors or health practices are causally linked to the incidence of major health problems, then a health education program may be planned to motivate and facilitate voluntary, desirable changes in those behaviors.

Health Care Setting - In the health care setting, complaints by health professionals about a growing incidence of emergency room visits might lead the health educator to survey records to pinpoint the extent to which the problem was general, or limited to patients with particular kinds of health-related emergencies. Interview data and records relative to the problems of a random sample of emergency care patients might be analyzed to determine the causes of visits within a given time frame. Interviews might also be conducted with health care providers. "Tracking" a patient through the system, or conducting a system analysis are other strategies employed in making needs assessment studies.

School Setting - In a school setting, needs assessments are used to determine the scope and sequence of curricula. Needs identified by national and state agencies, such as legislatures, should be considered and utilized, but local community data are essential to good curriculum planning. School and public health records are both important sources of basic data. Information about health knowledge, attitudes, and practices can be gathered directly from students, parents, administrators, and local school health personnel through testing, surveying, and interviewing. In addition to revealing the extent of some current health problems such as malnutrition, sexually transmitted diseases, unwanted teenage pregnancy, and the use of alcohol and other drugs, needs assessments can pinpoint social concerns of students, such as emotional stress and peer rejection, and can also identify areas of misinformation and misconception.

Workplace setting - At the workplace, medical professionals maintain records that can be used to identify health needs of the workers, e.g., data about health insurance claims, absenteeism and its causes, types of accidents and severity of injuries and workers' compensation claims. In addition the health educator in this setting would need to survey employees to discover their felt needs and interests. Analysis of all of these data would indicate priority needs for health promotion programs (NCHEC, 1996).



Needs Assessment is the systematic, planned collection of information about the health knowledge, perceptions, attitudes, motivation and health practices of individuals or groups and the quality of the socioeconomic environment in which they live (NCHEC, 1996).

Community Analysis is the gathering of information about the population under study including general health status, health care and social services available (Dignan & Carr, 1992).

Community Diagnosis is the end result of the analysis. It involves a synthesis of the information gathered, and the identification of the gaps between health problems and services. These gaps are an indication of need within the population being assessed (Dignan & Carr, 1992).

Primary Data is original data gathered by the health educator directly from or about the population of interest.

Secondary Data is data that has already been gathered by others that may or may not be directly from the population being assessed.

ASSESSING

A. OBTAIN HEALTH-RELATED DATA

To obtain data, multiple methods should be used. Following are examples of primary and secondary data collection methods and sources. Keep in mind that not all collection methods and sources are appropriate in all practice settings.

Primary Data Collection Methods

Examples of primary data collection methods are:

Surveys: Surveys are used to determine knowledge, attitudes, beliefs, and behavior. A good survey is well constructed, tested for validity and reliability, has a high response rate and valid sample. Survey methods include: mail, telephone, and face-to-face surveys and interviews.



Mail surveys are least costly, can include a large number of people, may provide more candid responses, but they may have a low response rate, are only useful with a literate population, and do not allow for explanation/clarification of questions and may be affected by question construction bias.



Telephone surveys are quick, inexpensive, allow for more in-depth questioning, have a high response rate, but are restricted to those with telephones, may produce an unbalanced sample, and may be affected by interviewer bias.



In-person or face-to-face surveys have a very high response rate, can probe for detailed responses, but are costly, and can seriously be affected by interviewer bias.

Interviews provide more opportunity to obtain complete information and are especially suited for gathering information from busy people, but the interviewer needs to be knowledgeable about the subject matter, data analysis can be more difficult, and these interviews can be very costly if many are needed and if they are lengthy. Key informant interviews are conducted with individuals who have knowledge and ability to report on the needs of a corporation, hospital or organization. Interviews with key informants are short, and quick. They are usually inexpensive as there are only a limited number of individuals who can be identified as 'key informants', and may be affected by interviewer bias.

Steps in Designing and Completing a Survey

1. Determine the objectives. Be sure to consult those who have interests in the outcomes at stake (stakeholders).
2. Define the population to be studied.
3. Determine the specific data to be collected and the methods of measurement.
4. Choose the sampling unit and the sample size.
5. Determine the method of contacting individuals/collecting data - (interviews, mailed questionnaire, telephone, etc.)
Plan methods to reduce nonresponse rates.
6. Construct the questionnaire to obtain the desired information.
Use existing validated items when possible.
7. Collect the data.
8. Process and analyze the data.
9. Report the results. This should include implications and recommendations for action.

(Dever, 1991)

Resource Inventories: Resource inventories involve the use of agency records and interviews to establish who is providing what services, and the comprehensiveness and continuity of those services. This information allows for the identification of gaps, or needs in service delivery, type, etc. The information gathered is only as complete as the records and the extent to which the agency cooperates with the process of data gathering.

Observation: Observation is used to gather data through direct surveillance of the population under study engaging in the behaviors being targeted. This can be accomplished through watching and recording specific behaviors of the population being observed or becoming part of the day-to-day activities (McKenzie & Smeltzer, 1997).

Community Forum: A community forum is a public meeting. It brings people together to discuss their perception of their health problems. It is important to remember that the silent majority may not speak in this type of setting, and the vocal minority may speak too loudly (McKenzie & Smeltzer, 1997).

Focus Groups: These small group discussions, with structured open-ended questions, are useful for obtaining information about feelings, opinions, perceptions, insights, beliefs, misconceptions, attitudes, and the receptivity of a group to an idea or issue. Focus groups are not easy to conduct and should be led by a skilled facilitator. Care must be taken when framing the questions so that poor wording does not result in less than useful information. Since participants are selected based on specific criteria, and are invited to participate, the data gathered is not generalizable (McKenzie & Smeltzer, 1997).

Nominal Group Process: This process is highly structured. It utilizes small groups of 5-7 people with all members of the group having an equal voice in the discussion and voting. All participants share their opinions by privately ranking the ideas being proposed and then sharing the ranking with the group in round-robin fashion. This is a time consuming process, usually more than an hour, and may require a large space depending upon the total number of people participating (Dignan & Carr, 1992).

Delphi Panels: This is a form of group process that generates consensus through the use of a series of mailed questionnaires when the respondents are unable to meet in one place. The process involves three groups: decision makers, staff, and respondents. A questionnaire of one or two broad questions is sent to the respondents. Their responses are analyzed and from these a second questionnaire is developed. More specific questions for further clarification are included. The questionnaire is sent to the same group of respondents and their responses are again analyzed. Another questionnaire is developed, etc. The usual number of rounds is three to five (Gilmore & Campbell, 1996).

Health Risk Appraisals/Assessments (HRA): These instruments require people to answer questions about their health history, health behavior, and the results of health screenings such as: blood pressure, cholesterol, height and weight. These data are then compared against a database of individuals with similar characteristics and provides a risk assessment for a number of diseases as well as life expectancy (McKenzie & Smeltzer, 1997).

Secondary Data Sources

Following are examples of secondary data sources:

- Health status indicators:
vital statistics, police records, injury/hospitalization records, absenteeism, morbidity/mortality records, reportable disease records, epidemiological studies, incident reports, safety surveys, etc.
- Health care system
- Social assistance programs
- Business and commerce
- Demographics
- Literature

B. ANALYZE INFLUENCES ON HEALTH BEHAVIOR

Factors that Influence Health

Following are examples of factors that may foster or hinder well being:

- Knowledge, attitudes, beliefs
- Culture and significant others
- Religion and spiritual beliefs
- Environment - physical and psychological
- Power - political and/or economic
- Skills
- Resources - access, quality, and cost
- Policies
- Concerned members of the population
- Stakeholders
- Competitors
- Collaborators
- Organizational structure
- Intra/interorganizational circumstances

C. INTERPRET NEEDS FOR HEALTH EDUCATION

The following is an example of how the need for health education can be inferred:

1. Analyze data, both primary and secondary
2. Compare data to local, state, national or historical situation
3. Consider the social, cultural and political environment
4. Set priorities by:
 - Assessing the size of the problem.
What percentage of the population is directly affected?
 - Determining the seriousness of the problem.
How urgent/critical is the problem?
How severe is the problem?
What is the morbidity/mortality degree, duration, disability associated with the problem?
What are the medical costs associated with the problem?
What is the potential number who may be affected or effected by the problem?
 - Determining effectiveness of the possible interventions.
How effective are health education interventions in addressing the problem?
 - Determining appropriateness, economics, acceptability, resources, and legality of the possible intervention.
Given the population, is the intervention appropriate and in accord with societal/group norms?
Are there sufficient resources for implementation?
Is the intervention legal?

(Pickett & Hanlon, 1990)

NOTES

*Responsibility II***PLANNING EFFECTIVE HEALTH
EDUCATION PROGRAMS**

Program planning begins with the assessment of existing health needs, problems, and concerns. The extent to which these are directly linked to health behaviors determines the specific changes in behaviors for which the program planning process is set in motion. Relevant people are identified and involved in the project, objectives are established, educational methods selected and resources located. It is within this process that planning for program evaluation is begun as well (NCHEC, 1996).

Following are examples of planning in the different practice settings:

Community Setting: In the community setting in which a needs assessment identified hypertension as a significant health problem, the health educator would convene a meeting of representatives of relevant organizations and groups to 1) explore available services in the community, 2) determine the type of health education most needed (e.g., one that would motivate people to seek screening for unsuspected hypertension), and 3) secure financial support from agencies and groups that would want to participate. Establishing program activities and selecting specific interventions would depend upon the characteristics of the people involved, their special constraints and concerns, and the fit between program schedules and other obligations of the potential participants.

Health Care Setting: Research indicates that patients who have realistic expectations regarding surgery experience a smoother, faster recovery. The health educator in a health care setting would work with a group of nurses, physicians, and anesthetists to plan an orientation program for patients who elect major surgery of some kind. The goals of the program would be to provide education for patients prior to their admission to the hospital. The role of the health educator in this setting would be to assist the committee in establishing behavioral objectives, evaluating results, documenting the education effort, designing promotion activities and training interdisciplinary staff to conduct the program as appropriate.

School Setting: Although needs assessment is an essential first step in planning health education in schools, ordinarily the decision to provide such instruction is made by administrators. A health teaching specialist ultimately assigned to develop the curriculum would therefore not be required to sell the idea to anyone so much as to implement a program that would meet the student needs that motivated the administrative decision in the first place. In such a situation, the school health educator would organize an advisory committee consisting of teachers with special interest in health teaching, a school administrator and members of community groups, such as the medical society, voluntary agencies, parents, youth groups leaders, clergy and student representatives. Curriculum planning would be carried out according to known learner needs and interests, community health needs, and recommendations gathered from the literature and the advisory committee.

Workplace Setting: In the workplace, data from insurance records, safety records, and workers' compensation claims, as well as information gained through a survey of employee needs, would provide the basis for a presentation to top management outlining the benefits and costs of a health education program. Upon gaining administrative support, the health educator convenes an employee committee with representatives from all levels of the organization to advise and make recommendations concerning program priorities, objectives, scheduling of programs, publicity, incentives and possible fees (NCHEC, 1996).



Program "is a set of planned activities over time designed to achieve specific objectives" (Green & Kreuter, 1999, p.508).

Program Planning is the process of identifying needs, establishing priorities, diagnosing causes of problems, assessing and allocating resources, determining barriers to achieve objectives (Green & Kreuter, 1999).

Mission Statement may also be referred to as the purpose, program overview or aim. It can be a one sentence statement or short narrative that clearly describes the overall focus of the program (McKenzie & Smeltzer, 1997).

Goal is the broad, future-oriented event that is the aim of the program. It clearly describes what the program is designed to accomplish (Simons-Morton, Greene, & Gottlieb, 1995).

Objectives enable the goals to be met. They outline, in measurable terms, the changes in behavior, attitude, knowledge, etc. that will take place in the intervention group as a result of the program (McKenzie & Smeltzer, 1997).

PLANNING

A. RECRUIT RESOURCES FOR SUPPORT AND ASSISTANCE IN PROGRAM PLANNING

Recruiting Support

Soliciting support for assistance in the planning and implementation of your program should begin with a review of community resources/organizations, key people, and representatives of the population whose participation would contribute to program success. It is usually wise to contact these resources in writing.



Include the following in your letter:

- Purpose or intent of your letter
- The intervention population for which the program is being planned
- The health issue being addressed
- The rationale or justification of need for the program
- A clearly articulated request for support
- A means for the person to respond
- Your name, title and organization

(Keyser, Morrow, Doyle, Ogletree, & Parsons, 1997)

B. DEVELOP A LOGICAL SCOPE AND SEQUENCE FOR THE PLAN

Theory

Theories are used as the basis for program development. A theory is a set of interrelated ideas, definitions, and suggestions that allows for a systematic study of an event or situation through the identification of relationships among variables, in order to explain and predict the circumstance (Glanz, Lewis, & Rimer, 1997). See Chapter 7 for discussion of specific theories.

Planning Models

In an effort to help program planners, a number of models and planning tools have been developed over the years. They include, but are not limited to:

PRECEDE-PROCEED (Predisposing, Reinforcing, Enabling Constructs in Educational/Ecological Diagnosis and Evaluation – Policy, Regulatory and Organizational Constructs in Educational and Environmental Development) focuses on outcomes of various “diagnostic” steps divided into five phases, followed by 4 additional phases concerned with implementation and evaluation. The steps include: social, epidemiological, behavioral and environmental, educational and organizational, administrative and policy diagnoses (Green & Kreuter, 1999; McKenzie & Smeltzer, 1997; Simons-Morton, et al., 1995).

Phase 1, the social diagnosis, is essentially concerned with data gathering, and a review of existing information on the health of the specific population being addressed. The epidemiological diagnosis, Phase 2, analyzes the problems identified during the social diagnosis and separates them into health and environmental categories. During the behavioral and environmental diagnosis, Phases 3 and 4, causes for the identified problems are sought, and a set of behavioral objectives developed. In Phase 5, the educational diagnosis seeks to identify the behaviors that are causing the health problem in the first place, which include predisposing, intervening, enabling and reinforcing factors. The administrative and policy diagnosis is based on the information gathered in the previous steps and is used to decide the type of program that will be planned, i.e., structured classes, mass media presentation, etc. and an assessment of available resources (Green & Kreuter, 1999; McKenzie & Smeltzer, 1997; Simons-Morton, et al., 1995).

Phase 6 is program implementation, when the methods and strategies are put into action. Phase 7 is process evaluation, a review and assessment of the program components before and during implementation. Phase 8, impact evaluation, assesses the changes in knowledge and behavior that occurred in the participants as a result of the intervention. In Phase 9, outcome evaluation involves identifying the changes in health status of the participating population group (Green & Kreuter, 1999; McKenzie & Smeltzer, 1997; Simons-Morton, et al., 1995).

MATCH (Multilevel Approach To Community Health) is an intervention planning model that consists of 5 phases, each with several steps, that assist in the development of health education programs by establishing the connections between health outcomes, intervention objectives, and intervention approaches.

The 5 phases of MATCH are: goal selection, intervention planning, program development, implementation preparation, and evaluation.

Phase I - Goal Selection. In the first phase, the health status goals, population, health behavior and environmental factor goals are identified. **Phase II - Intervention Planning.** This phase includes identifying the targets of the intervention action and the intervention objectives, mediators of the intervention objective are identified (that is, those variables that are causally associated with the desired behavior such as knowledge, attitudes, skills, values, etc.) and lastly, the intervention approach is selected. **Phase III - Program Development.** During this phase, the program components are created, curricula and intervention guides are selected or developed, session plans are developed, and instructional



materials are created or acquired. Phase IV - Implementation preparation. Based on the first three phases, adoption, implementation and maintenance of the intervention is facilitated, implementors are selected and trained. Phase V - Evaluation. During this last phase, evaluation is conducted. The program impact is measured and outcomes are monitored (Simons-Morton, et al., 1995).

PATCH (Planned Approach To Community Health) while not a model for program planning per se, was developed to create a mechanism through which effective community health education could occur. It was intended to produce a system that linked the local, state and federal public health agencies to assist those at the local level. The program planning aspect of it is based on the PRECEDE model (Butler, 1997; Simons-Morton, et al., 1995).

Healthy People 2010: An extremely important planning tool and reference point for health educators is Healthy People 2010. It contains health objectives for the U.S. for the next decade. The goals of Healthy People 2010 are to:

- 1) Increase quality and years of healthy life
- 2) Eliminate health disparities

Healthy People 2010 objectives are subsumed under the following headings:

- Promote healthy behaviors
- Promote healthy and safe communities
- Improve systems for personal and public health
- Prevent and reduce diseases and disorders.

More information about Healthy People 2010 can be found at <http://www.health.gov>

Planning Process

Planning moves from the big idea down to the daily tasks, from the abstract to the concrete. Program planning is based on written plans that include the following elements:

- goal(s)
- measurable objectives
- appropriate activities
- description of resources necessary
- evaluation procedures

Planners should:

- | | |
|------------------------------|---|
| Plan the process | - establish a time table for planning and for the plan |
| Plan with people | - involve representatives of the intervention population |
| Plan with data | - use information as the basis for planning |
| Plan for permanence | - plan for on-going, long term projects |
| Plan for priorities | - plan programs that have the highest need and that will make the greatest impact |
| Plan for measurable outcomes | - identify the criteria against which the goals and objectives will be measured |
| Plan for evaluation | - identify what data needs to be gathered, when, by whom |

(Breckon, Harvey, & Lancaster, 1999)

C. FORMULATE APPROPRIATE MISSION, GOALS AND OBJECTIVES

Mission Statement: This may also be referred to as the purpose, program overview or aim. It can be a one sentence statement or short narrative that clearly describes the overall focus of the program (McKenzie & Smeltzer, 1997).

Examples:

- The mission of JAH Corporation's health promotion program is to improve the health status of our employees.
- The purpose of the Upper County Coalition is to address the health needs of the citizens in the region.

Goal: A goal is the broad, future-oriented event that is the aim of the program. It clearly describes what the program is designed to accomplish (Simons-Morton, et al., 1995). Goal statements should be simple, concise, and should include who will be affected and what will change as a result of the program (McKenzie & Smeltzer, 1997).

Examples: The goal of the program is to:

- reduce prostate cancer deaths among African-American men through early detection.
- prevent Hepatitis B infection in emergency service personnel.

Objectives: Objectives enable the goals to be met. They are specific, measurable statements that are outcome oriented. They are often written to answer: Who will do How Much of What by When?

There are many types of objectives, including: behavioral, learner, impact, outcome, program, administrative, and process. (See Table 1)

Behavioral Objectives describe the behaviors or actions that the population will engage in that will resolve the problem and lead to attainment of the program goal. They are statements of desired outcome that indicate who is to demonstrate how much, of what action, by when (Green & Kreuter, 1999).

Examples:

- Among women attending this program, monthly breast self-examination will increase by 50 percent over the following 6 months.
- Disciplinary actions for violence will decrease by 50 percent among 6 - 8th graders by June at XYZ Middle School.

Learner Objectives or learning objectives, describe the actual knowledge, attitude, or skill changes that need to occur to enable the behavioral objectives. They are the educational or learning tasks that must be accomplished in order to achieve the desired behavior (Deeds, 1992).

Examples:

- The women can correctly demonstrate how to perform a breast self-examination on a model.
- Students will be able to identify 3 ways to effectively handle their anger.

Behavioral and learner objectives also may both be referred to as "**impact objectives**". They are not the desired end, but rather the means to the end (Simons-Morton, et al., 1995).

Program or Outcome Objectives are related to the goal but are specific, measurable statements of what the educator wants to accomplish at a given time (usually 3-5 years). They are outcome, or future oriented and related to health status. They may also be referred to as "**health objectives**". They represent the change in health status that is the desired result of the educational intervention. These are the "ends" rather than the means such as changes in morbidity, mortality, quality of life (Deeds, 1992; Simons-Morton, et al., 1995; McKenzie & Smeltzer, 1997).

Examples:

- Within 3 years, breast cancer deaths will decrease by 15 percent in Anywhere, USA.
- Violent behavior on school grounds will be eliminated within 5 years.

Process or Administrative Objectives are the daily tasks and work plans that lead to the accomplishment of all other planned objectives.

Examples:

- Identify prominent women in the community to become members of the planning committee.
- Contact 10 OB/GYN physicians to gather support for the program.
- Attend PTA/PTO meetings in each elementary school to recruit volunteers.

Objectives Check List

- _____ 1. Objectives should be clear statements
- _____ 2. Objectives should include just one indicator
- _____ 3. Objectives should state reasonable time frames
- _____ 4. Objectives should be stated in terms of performance, not effort
- _____ 5. Objectives should be realistic and within the control of those responsible
- _____ 6. Objectives should be relevant, logical, feasible, observable, and measurable

Table 1
Types of Objectives

Objective	Result	Evaluation
Program Objective	Changes in morbidity, mortality, quality of life.	What is the outcome? Is there a change in health status and is it attributed to the program?
Behavioral Objective	Changes in behavior, behavioral adaptation.	What is the impact? Is there adoption of a new healthier behavior and can it be attributed to the program?
Learner Objective	Changes in knowledge, attitude, practices, etc.	Is there the requisite change in knowledge, attitudes, habits, skills needed for behavior change?
Process Objective	Adherence to time line tasks, completion of activities, efficient use of resources	Is the program working, are people attending, are the methods appropriate?

(Adapted from Deeds, 1992)

Writing Measurable Objectives

To ensure that the objectives are measurable, add measurement criteria. This can be accomplished by using verbs that show action, that is describe the expected behavior or performance. These verbs are more precise and open to fewer interpretations.

Examples of verbs to use when writing objectives related to knowledge:

cite	draw	name	recall	relate	tabulate
count	identify	point	recite	repeat	tell
define	indicate	quote	recognize	select	trace
describe	list	read	record	state	write

Examples of verbs to use when writing objectives related to comprehension:

associate	contrast	distinguish	extrapolate	locate	report
classify	describe	estimate	illustrate	predict	restate
compare	differentiate	explain	interpolate	rearrange	review
compute	discuss	express	interpret	reorder	translate

Examples of verbs to use when writing objectives related to application:

apply	dramatize	operate	relate	schedule	translate
calculate	employ	order	report	select	use
complete	examine	practice	restate	sketch	utilize
demonstrate	illustrate	predict	review	solve	

Examples of verbs to use when writing objectives related to analysis:

analyze	contract	detect	distinguish	infer	question
appraise	criticize	determine	divide	inspect	relate
conclude	debate	diagram	experiment	inventory	separate
construct	deduce	differentiate	group	produce	summarize

Examples of verbs to use when writing objectives related to synthesis:

arrange	construct	formulate	plan	propose
assemble	create	generalize	predict	solve
collect	design	integrate	prepare	specify
combine	detect	imagine	prescribe	synthesize
compose	develop	organize	produce	test

Examples of verbs to use when writing objectives related to evaluation:

argue	critique	judge	revise
appraise	determine	measure	score
assess	evaluate	rate	select
choose	grade	recommend	test

Examples of verbs to avoid:

acknowledge	be aware of	believe	experience	learn
appreciate	be familiar with	enjoy	know	understand

These verbs are vague and not measurable.

D. PLANNING EDUCATIONAL INTERVENTIONS

Selecting Strategies and Planning Interventions

Questions to be asked in selecting strategies and designing educational interventions include:

- What specific behaviors must the learners acquire or enhance to reduce the extent of the problem?
- What information and skills must be gained for them to act in a new way or to maintain an existing way?
- What resources are needed?
- What related services or other kinds of conditions are needed?
- Which actual actions can be addressed in the educational program?
- What methods would best facilitate obtaining the objectives?

The method chosen should:

- be acceptable within the program population, i.e., culturally compatible and take into account the age of the program population
- take into account the literacy level of the program population
- take into account the visual and auditory capabilities of the population
- be compatible with the usual and customary means by which the population obtains information, be cost effective, feasible, and efficient

(Dignan & Carr, 1992)

Remember that the intervention activity or educational method to be used should be reflected in each objective.

A more in-depth discussion of implementation is presented in Chapter 3, Implementing Health Education Programs.

D. PLAN FOR EVALUATION

Evaluation and the Planning Process

Evaluation must be included as part of the overall planning process, that is, evaluation must be planned.

The following questions should be asked when planning for evaluation:

- What actions or behaviors can and should be measured?
- What specific measures will be used and when?
- What educational techniques or methods are best and how can they be monitored?
- What training is needed for staff or other personnel to carry out the evaluation?
- What organizational resources or arrangements are needed?
- What budget is required?
- What are the resource capabilities of the organization?

A more in-depth discussion of evaluation is presented in Chapter 4, Evaluating Health Education Programs.

NOTES

NOTES

Responsibility III**IMPLEMENTING HEALTH
EDUCATION PROGRAMS**

The business of a health educator is to educate people about healthful behaviors and to motivate the adoption of a healthful lifestyle, whatever the setting. Moreover, the methods, techniques, and resources used in implementing educational programs are essentially the same in every situation. Other processes involved in the effective implementation of a health education program include designing, managing and evaluating the activities employed to that end (NCHEC, 1996).

Following are examples of implementation in the different practice settings:

Community Setting - In the community setting, if the health education specialist was implementing a smoking cessation program, the mass media would be used to inform concerned people about the availability of the program (dates, times, place, topic, etc.). The educator would need to train group leaders to facilitate group discussion and broaden the number of sessions that could be offered. Programs would be monitored to be sure that the quality of instruction was equivalent even among leaders and that outcomes were consistent with objectives. Other methods such as role playing, simulations, games, demonstrations, and techniques such as use of closed circuit television presentations and lectures delivered by authoritative and stimulating speakers are frequently used.

Health Care Setting - In the health care setting, a smoking cessation program for outpatients has been planned. The health educator's coordination function is to act as the liaison among individuals and groups within the clinic, explain how the program will operate and anticipate any problems that might emerge. This responsibility also includes the preparation of materials for those professionals who will be involved in the program and maintaining open communications among group facilitators.

School Setting - In the school setting, implementation usually has to do with the instructional function in which the health teaching specialist seeks to increase students' knowledge, foster positive attitudes towards health, and promote adoption of health-enhancing behaviors. A classroom teacher is responsible for implementing the health education program (curriculum) formulated by others, usually district-level committees and school administrators. A teacher infers objectives appropriate for learners at an assigned level and prepares related daily lesson plans that build, one upon the other, toward achievement of the overall program. Health educators in school settings employ the widest range of methods and techniques, more often experiential than passive in approach. Selection and utilization of community resources (human and material) are essential aspects of the teaching task. Learning activities and outcomes are monitored to ascertain the quality and effectiveness of the program.

Workplace Setting - At the workplace, the health education programs are concerned with early detection of illness, or precursor conditions known to lead to serious illness, and lifestyle patterns exhibiting high risk behaviors. For example, employers commonly offer programs that help individuals control weight and cholesterol levels through diet changes and exercise. Implementation may include disseminating newsletters, flyers, pamphlets, and posters; providing self-help study booklets or computer-assisted instruction; group discussion; or even financial incentives for participating in weight reduction programs, such as dollar rewards per pounds lost.

(NCHEC, 1996)



Implementation involves carrying out a series of learning activities designed to achieve changes in health knowledge, attitude, skills and/or behavior. It is the process of setting up, managing and executing a project (Keyser, et al., 1997).

Learning activities are the means used to carry out or implement the program plans. These are the instructional sessions that will address the learning objectives (Simons-Morton, et al., 1995). They are also referred to as: interventions, methods, strategies, wellness activities, promotion measures.

IMPLEMENTING

A. EXHIBIT COMPETENCE IN IMPLEMENTATION

Program Implementation

The following are five generic phases of the implementation process in health education.

Phase 1 - Gain acceptance for the program:

Acceptance of the program by the target population, and those who will provide the services of the program (staff and program sponsors) is critical to its implementation.

Phase 2 - Specify tasks and estimate resources:

A detailed list of all program activities and identification of the relationship between and among them needs to be developed. Especially important are those aspects of the program that are necessary for other components to take place. Using a Program Evaluation and Review Technique (PERT), Management by Objectives (MBO), or Critical Path Method (CPM) may be helpful. Only after the tasks have been identified can resource needs for each task be estimated. Resources needed may include staff, supplies, equipment, marketing/communication and direct educational needs.

continued on next page

Phase 3 - Develop plans for program activities:

To introduce the program to the target population, it may be helpful to use the "four p's" of marketing: product, promotion, place and price. Think of the intervention population as "customers" and the program sponsors as "providers."

Phase 4 - Establish a system for program management:

This system or schedule for ensuring that the program will progress as planned is developed once all of the activities, corresponding tasks and resources have been identified. Simply put, this is an implementation time line with time parameters assigned to each objective.

Phase 5 - Putting the plans into action: Putting the program into action can be done through a pilot, phasing in, or through total implementation.

Piloting, pilot testing or field testing allows for a trial run of the program on a small scale. For piloting to be useful, the program should include people who are representative of the eventual target population, and in the same setting.

Phasing in, while similar in that the entire program is not offered all at once, but in increments, it is not considered a trial run. Its participants are the target audience. The program can be phased in, in a number of ways: by limiting the number of participants, by choice of location, participant characteristics, or by limiting the program offerings.

Total implementation is when the entire program and all of its facets are begun at the same time. This is usually best used with "one-shot" types of programs, for example a screening event, or a one topic, one time lecture.

(Dignan & Carr, 1992; McKenzie & Smeltzer, 1997)

B. INTERPRET OBJECTIVES AS NEEDED TO IMPLEMENT PROGRAM

Pre-Testing

One activity useful in the implementation of health education interventions is pre-testing of the intervention population.

Uses of pre-testing:

- Assessing comprehension abilities
- Assessing attention and recall
- Identifying strengths and weaknesses in knowledge, skill or other ability
- Determining personal/individual relevance of the information to be presented
- Gauging sensitive or controversial elements of the health issue

Limitations of pre-testing:

- Cannot insure learning
- Does not guarantee behavior change
- Is not precise
- Is not a substitute for experience and judgment (Aspen Reference Group, 1997).

C. SELECT METHODS TO IMPLEMENT PROGRAM

Behavior is multifactorial, so multiple methods are needed to effect its change. There is no one correct method for any given population or health issue. In most situations, a variety of interventions and methods will be needed.

Health Education Methods and Techniques

There are numerous methods that can be utilized to implement a health education intervention. Following are a few of the ones more commonly used (McKenzie & Smeltzer, 1997).

Educational Activities: These are activities usually associated with courses, workshops or seminars. They include, but are not limited to:

- audiovisual materials
- printed materials
- classroom techniques
 - brainstorming
 - case studies
 - lecture
 - panel discussion
 - role playing, etc
- outside classroom techniques
 - health fairs
 - field trips

Environmental Interventions: These change the social or physical "environment" in which people live and/or work. They usually affect a large number of people and may change behavior by influencing awareness, attitudes, knowledge or through forced choice.

Behavior Modification: Interventions based on this technique are usually thought of as systematic procedures for changing behavior based on stimulus response theory with the emphasis placed on one behavior that either is to be increased or eliminated (McKenzie & Smeltzer, 1997).

Regulatory Activities: These are considered mandated actions such as laws, regulations, policies, rules, etc. Such actions are justified on the basis of "common good", that is, they are actions implemented to protect the public's health.

Advocacy Activities: In these activities the people who will be affected by a change are involved in the change process. These include such initiatives such as coalition building and community organizing.

Communication Activities: This approach includes the use of all types of communication channels to change behavior including print media, radio, television, editorial letters, billboards, newsletters, flyers, direct mail, product labels, self-help materials. These activities can increase knowledge, awareness, change or reinforce attitudes, provide cues for action and demonstrate simple skills.

Health Status Evaluation: These activities enable the individual to evaluate his/her own level of health through the use of health risk appraisals, screenings, self-examinations (breast self-examination, etc.).

Issues Related to Implementation

The best, most appropriate methods for implementation are those that enable the program goals and objectives to be met within legal, safe and ethical boundaries.

Legal Issues

Informed Consent

Informed consent is the process of notifying an individual about certain aspects of a program prior to his/her participation including:

- the nature and purpose of the program
- any inherent risks or dangers associated with participation in the program
- any possible discomfort that may be experienced from participation in the program
- the expected benefits of participation
- alternative programs or procedures that would accomplish results with the same outcome
- the option of discontinuing participation at any time (McKenzie & Smeltzer, 1997).

Omission and Commission

Negligence is the failure to act in a careful, or reasonable manner. Negligence results from either omission, not doing something you should have, or commission, doing something you should not have.

To reduce the likelihood of legal action:

- be aware of legal liabilities
- use only professionals or experts in the area being presented (licensed, certified or in other ways credentialed, when appropriate)
- inform participants about the potential risks of program participation and use a written informed consent.
- when appropriate, require medical clearance for participation
- instruct staff not to practice outside of their area of expertise
- follow building codes and regulations, as indicated (Patton, Corry & Gettman, 1986)

Safety Issues

To reduce the likelihood of an unsafe situation, be cognizant of where the program will be held. The safety of the internal and external environment should be evaluated. This includes: location (crime rate in the area), lighting (both inside and outside) of parking facilities and safety related to it, presence of classroom or program area hazards, condition of equipment, availability of medical assistance, if needed, etc.

Ethical Issues

Ethics permeate all aspects of the health educator's role. Practicing within the boundaries of the profession's ethical standards is imperative. The issue is being presented here because it is at the implementation stage where ethics are operationalized (See Code of Ethics in Appendix A).

D. MONITOR PROGRAM, ADJUSTING AS NECESSARY

Learning Principles

Generally, it is difficult to teach people who do not want to learn. To address this issue, focus on increasing motivation to facilitate the learning process. Using the following 10 principles may enhance the likelihood of learning.

To promote learning:

1. Use several senses. People retain 10% of what is read
20% of what is heard
30% of what they see
50% of what they hear and see
70% of what they say
90% of what they do and say
2. Actively involve the participants. Use methods that enable them to be active, rather than passive, participants. For example, use discussion rather than lecture.
3. Provide an appropriate learning environment. Keep extraneous interference and distractions, to a minimum, and ensure comfortable accommodations.
4. Assess learner readiness. People only learn if they are physically and emotional ready.
5. Establish the relevance of the information. People will tend to learn what they perceive is important for them. Knowing what is important can aid in making the information meet their needs.
6. Use repetition. Learning is enhanced if information is repeated several times in a variety of ways.
7. Strive for a pleasant learning experience. Encouragement through frequent, positive feedback and recognizable progress contribute to a positive experience.
8. Start with the known, move toward the unknown. Present information so as to build from the simple to the complex in an organized manner.
9. Generalize the information. Learning is more likely to occur if the information is applied to more than one setting or situation.
10. Appropriately pace delivery of the information. Adjust the rate at which information is covered to meet the needs of the participants.

(Breckon, et al., 1998)

NOTES

*Responsibility IV***EVALUATING EFFECTIVENESS OF HEALTH
EDUCATION PROGRAMS**

Evaluation begins with the program objectives. Program objectives tell us where we intend to go. Evaluation tells us whether we got there and, if we didn't get there, it provides clues to changes we might make to improve program effectiveness. When a health educator establishes program objectives and decides how they are to be evaluated, the process is begun.

Three kinds of evaluation are important: outcome evaluation, impact evaluation and process evaluation. Outcome evaluation is a long term undertaking and requires large population samples. Of most concern to the health educator are impact and process evaluation. Impact evaluation is the measurement of immediate changes occurring as the result of a health education program. For example, has the program brought about significant changes in knowledge, attitudes, or health practices? Process evaluation helps to identify the causes of a program's strengths or weaknesses and to indicate modifications that are needed to improve the program. One might want to know, for example, why a clinic program was not reaching the intended audience and discover that the clinic hours were not synchronized with the clients' hours (NCHEC, 1996).

Following are examples of evaluation in the different practice settings:

Community Setting - In the community setting, the educator may want to evaluate the effectiveness of a program designed to motivate parents to take their children to neighborhood clinics for immunization against measles. Evaluation of the health education program requires data regarding the number of parents who take their children to the clinics, and the location of those facilities in the community. These data would provide a measure of the impact of the program on the health-related behavior of parents. If these data were compared with data on the incidence of measles, pockets of non-conformance could be identified and program efforts in those neighborhoods strengthened. Program efforts are then assessed and, if necessary, the program is modified.

Health Care Setting - Evaluation by a health education department in a health maintenance organization has revealed that patients in diet-change classes often experience immediate success, but are not always able to maintain the change following the end of the classes. That is, a link between the new behavior and future behavior has not been achieved. A review of needs assessment data reveals that most such patients lacked family or peer support of their new diet behavior. Program modification involved the inclusion of family members or housemates in the classes, and new peer networks were established and encouraged to meet after classes terminated.

School Setting - In the school setting, evaluation is not a sometime thing. The health educator stipulates learning objectives in advance of instruction and devises evaluation activities to match. Impact evaluation in schools seeks to assess the level of achievement attained by the students; the effectiveness of the instruction, and the success of the program. Results of the same impact evaluation procedures can be used for formative or summative purposes, depending on the breadth of the content encompassed by a test or activity. The information generated by evaluation of health instruction is recorded as evidence of student progress in learning. Used formatively, those data tell students how well they have performed, and if there are weaknesses, pinpoint what they are. Summative purposes employ data in a wider view of a student's overall performance at the end of a unit or course methodology and/or objectives, and summatively as the basis of grading or self-evaluation.

Workplace Setting - At the workplace, the effect of education on proper lifting among employees could be evaluated. Achievement could be assessed by knowledge tests, and observed performance of the correct use of the body for safe lifting. Such information would indicate the impact of the health education program in behavior changes among the workers. Measurement to determine if a reduction in absenteeism due to back injury results, and if health insurance costs due to back injury decrease, would indicate the extent to which the objective had been attained.

(NCHEC, 1996)



Evaluation is the "comparison of an object of interest against a standard of acceptability" (Green & Kreuter, 1999, pg 221).

Research is an organized means to obtain information, to search for the truth, to investigate human feelings, values, behaviors, activities, processes, elements, and relationships (Baumgartner & Strong, 1994).

Reliability is a term used in research for consistency, or the likelihood that results would be repeated (Modeste, 1996).

Validity is the degree to which a test or assessment measures what it is intended to measure. Using an acceptable (valid) instrument increases the chance of measuring what was intended (Modeste, 1996).

EVALUATING

A. DEVELOP EVALUATION PLANS

Uses For Evaluation

Evaluation in health education is used for a number of reasons. It is used to:

- Determine if program objectives were met
- Document strengths and weaknesses of the program for decision-making and planning
- Monitor standards of performance and establish quality control mechanisms
- Provide data for fiscal accountability
- Improve staff member skills in planning, implementing and evaluating activities
- Meet grant or contract requirements
- Promote public relations and awareness
- Determine the extent to which a program or its components are generalizable to other populations or settings
- Contribute to the knowledge base of health education program design
- Identify hypotheses about behavior for future evaluation

(Windsor, Baranowski, Clark & Cutter, 1994)

Types of Evaluation

The purpose of the evaluation will determine the method to be used and the type of data needed. Following is a summation of the various types of evaluation used in health education.

Process Evaluation: This is the first level of evaluation. It provides for early detection of problems that may impede implementation, and allows for correction (Green & Kreuter, 1991). This type of early evaluation documents program feasibility. It includes examining the situation, events, problems, and people during program development and implementation. The activities of process evaluation might include assessment of staff performance and interaction with the client(s), budget review, general department functioning (Windsor, et al., 1994).

Formative Evaluation: Formative evaluation is used while the program is in progress, to identify problems with implementation, and efficacy. This is usually done through a pilot or field test of the intervention. The information gleaned from this type of evaluation is used to revise intervention components, data collection instruments or procedures (Windsor, et al., 1994).

Impact Evaluation: This type of evaluation assesses the immediate effect of an intervention on the behavior, knowledge, attitudes, etc. of a given audience or population (Green & Kreuter, 1991). It measures the extent to which the program caused the desired changes.

Outcome Evaluation: Outcome evaluation determines if the long-term program goals were met, such as changes in morbidity, mortality, health status and other general health indices of a given population (McKenzie & Smeltzer, 1997).

Summative Evaluation: Impact and outcome evaluation are examples of summative evaluation. They measure whether the goals of the program were accomplished (McKenzie & Smeltzer, 1997).

Quantitative Evaluation: This type of evaluation produces hard data, such as frequencies, ratings, scores, counts. It is deductive in nature. This method is appropriate when results will be compared to those of other groups or to the general population (McKenzie & Smeltzer, 1997).

Qualitative Evaluation: The type of evaluation is inductive where individual cases are analyzed and an opinion is formulated. It produces soft data. It is appropriate in cases where descriptive information about the participants is needed (McKenzie & Smeltzer, 1997).

Choosing Your Evaluation

It is not uncommon that, because of limited resources, a choice between process or outcome evaluation will need to be made. Unfortunately, neither of these, independently, will provide a complete picture of what happened. Some experts suggest that if you must choose, choose outcome evaluation. This is the only way to establish if you accomplished your objectives, although the process evaluation can help you understand why you did or did not.

To assist you in deciding on which evaluation will be best for a program, consider the following:

- How long will your program last? Will the implementation be long enough to permit measurement of significant effects and periodic adjustment?
- Do you want to repeat or continue your program?
- Are your objectives measurable in the foreseeable future?
- Is there management support or public demand for program accountability?
- What aspects of the program fit best with your agency's priorities?
- Will an evaluation report help communication efforts compete with other agency priorities for future funding?

Program planners often face constraints when undertaking evaluation tasks. These constraints may include:

- limited funding
- limited staff time and capabilities
- length of time allotted to the program
- limited access to computer facilities
- agency restrictions to hiring consultants or contractors
- policies limiting the ability to gather information from the public
- management perceptions regarding the value of evaluation
- levels of management support for well-designed evaluation activities
- difficulties in defining the objectives of the program or in establishing agency consensus
- difficulties in designing appropriate measures for communication programs
- difficulties in separating the effects of program influences from other influences on the target audience in real-world situations

Even if these constraints make it necessary to adjust the evaluation, it is not true that 'something is better than nothing.' If the evaluation design, data collection, or analysis must be altered, the following decisions must be made regarding:

- whether the required compromises will make the evaluation results invalid
- whether an evaluation strategy is essential for the particular situation, compared with other compelling uses for existing resources

(U.S. Department of Health and Human Services [USDHHS], 1989)

Sources of Evaluation Data

Evaluation is based on data. The purpose and type of evaluation planned will determine the data source and collection method. Data for evaluation can be collected in a number of ways. See Table 2.

Table 2
Sources of Data

Method	Advantages	Disadvantages
Self reports Written questionnaire	No interviewer's bias Convenient Low cost Minimal staff time Easy to administer Quick Standardized	Possible low response rate Possible unrepresentation No means to clarify questions Need homogenous group if response is low
Face-to-face interview	High response rate Flexibility Obtain in-depth data Develop rapport	Expensive Requires trained interviewers Possible interviewer bias May be time consuming
Telephone interview	Moderate cost Relatively easy too administer Good response rate	Possible problem of representation Possible interviewer bias Requires trained interviewers
Observation	Accurate behavioral data Can be unobtrusive Moderate cost	Requires trained observers May bias behavior being observed Possible observer bias May be time consuming
Existing records	Low cost Easy to randomize Eliminates need to collect data Minimum staff needed	May need agency cooperation Certain data may be unavailable
Meetings	Good for formative evaluation Low cost Flexible	Possible result bias Limited input from participants

(McKenzie & Juris, 1993)

Types of Data and Corresponding Statistical Tests

The type of data collected will prescribe the type of analysis that can be used. Following are the classifications of data with examples of the tests that can be performed on each:

Nominal variables are essentially labels. They are used to name categories. They do not have a numeric value. For example:

curly hair, straight hair, wavy hair
married, single, divorced, widowed
urban, suburban, rural

The following are examples of the statistical tests that can be performed on nominal data:

Frequencies
Mode
Chi-square

Ordinal variables imply intensity or severity. One category is more or less than another. Categories are sequenced, rank ordered. For example:

underweight, normal weight, overweight, obese
youth, middle aged, elderly
sedentary, moderately active, very active

The following are examples of the statistical tests that can be performed on ordinal data:

Frequencies
Mode
Median

Interval scale variables have a standard unit of measure but do not have an absolute zero. For example:

temperature in degrees Fahrenheit
standardized test score

Ratio scale variables have a standard unit of measure with an absolute zero. For example:

degree Centigrade
weight, height

The same types of statistical analysis can be performed on both ratio and interval data. Examples of these analyzes are:

- Frequencies
- Mean
- T-test
- ANOVA/MANOVA
- Pearson Correlation
- Regression Analysis

Validity and Reliability

Types of Validity

Construct Validity is concerned with the accuracy of the "construct" or concept that an instrument is attempting to measure. For example, if health educators need to measure "locus of control," they would need to find an instrument with well demonstrated accuracy in measuring the construct of "locus of control."

Content Validity concerns itself with the subjective determination of validity, utilizing some form of expert judgment. This could include literature review or the evaluation of experts in a field.

Internal Validity is the degree to which an investigator's conclusions correctly describe what actually happened in a study. The degree of certainty that a program caused a change that is being measured or the results of an evaluation is the internal validity. Internal validity requires variables which are logically consistent that represent a testable "causal relationship."

External Validity refers to the generalizability of the findings. External validity represents the extent to which conclusions drawn from the research or evaluation can be appropriately applied to other similar settings or populations outside the present study.

(Modeste, 1996)

Types of Reliability

Test-retest involves comparing results from one administration of an instrument with the results of a second administration of the same instrument at a later time, using the same subjects.

Alternative-form method or multiple form compares the results of two forms of the same instrument.

Split-half method divides an instrument in half, and compares the results of one half against the results of the other.

Interobserver or interrater reliability compares the results obtained from one observer with the results of another using the exact same method.

Intraobserver method or intrarater reliability compares the results obtained by the same observer on the same subjects, but at different times.

Internal consistency measures the extent to which the items in the instrument are similar or measure the same concept.

(Adler & Clark, 1999; Simons-Morton, et al., 1995)

Evaluation Designs

Evaluation is a type of research. Therefore, the same types of designs used to conduct research may be used to conduct an evaluation. Designs are intended to measure change and determine if change is a result of the intervention.

Non-experimental or single group design: This design does not use a comparison or control group, and participants are not randomly assigned (Windsor, et al., 1994). In this type of design, data can be collected from program participants at the end of the program, or at both the beginning and end, and compared for differences using a pre-test, post-test. However, because this design does not allow for control over factors that may confound the results, it cannot be used to determine if the changes are solely the result of the intervention.

Quasi-experimental design: In this design, an experimental group and a control group or comparison group are formed by methods other than random assignment. Although both a control and experimental group are used, and data are collected from both prior to and after the intervention, the non-random assignment does not allow for the greatest control over confounding variables. Hence, observed changes in the experimental group may support the effectiveness of the intervention (Windsor, et al., 1994).

Experimental design: True experimental design uses random assignment of participants to the control and experimental groups. Data are collected from both groups before and after the intervention. Because this design allows for the most control of confounding variables, observed changes in the experimental group are the most defensible evidence of the effectiveness of an intervention (Windsor, et al., 1994)

Elements of an Evaluation Design

Every type of evaluation design contains certain basic elements. They include the following:

A statement of objectives: There must be clear and definite objectives to be measured in order for evaluation to determine achievements.

Definition of data to be collected: What is to be measured in relation to the objectives must be determined.

Methodology: A study design is developed to allow for valid and reliable measurement.

Instrumentation: Data collection instruments are designed and pre-tested.

Data collection: This is the process of collecting data.

Data processing: The data are put into a form that can be analyzed.

Data analysis: Statistical tests are applied to the data to identify significant relationships.

Reporting: Evaluation results are compiled and reported (USDHHS, 1989).

Evaluation Planning

Evaluation planning begins during program planning and before implementation.

Following are 10 suggested steps for planning an evaluation:

1. Review program goals and objectives
2. Define the purpose of the evaluation
3. Identify what questions need to be answered for the 'stakeholders'
4. Select indicators or criteria against which success will be measured
5. Identify the type and design of the evaluation to be conducted
6. Plan the steps necessary to carry out the evaluations
7. Identify/develop the evaluation instrument
8. Plan data collection: who will collect what, when, where and how
9. Select statistical methodology for analysis of data
10. Determine who will analyze the data

(McKenzie & Smeltzer, 1997; Windsor, et al., 1994)

B. IMPLEMENT EVALUATION PLANS

Managing the Evaluation Process

The following are suggested "Do's and Don't's" for managing the evaluation process:

DO

- Involve the person responsible for implementing the evaluation early in the planning process
- Plan for evaluation early in the planning process
- Use a planned evaluation process and conduct the evaluation in a systematic manner
- Coordinate evaluation with all phases of the program and with all personnel

DON'T

- Use sophisticated and complicated evaluation designs if more simple techniques work just as well
- Attempt or set up an evaluation if adequate resources to implement it are lacking
- Use an evaluation design that is out of proportion to that which is being evaluated; use the level, amount and approach that is appropriate for the program
- Hesitate to ask simple, straightforward questions
- Ignore subjective information gathered from observation and comments and be overconfident in objective data gathered from questionnaires, etc.

(Timmreck, 1995)

C. INTERPRET EVALUATION RESULTS

Data analysis in education is used to summarize information through measures of central tendency, measures of dispersion or variability. It enables a determination to be made of the seriousness of observed differences, whether the differences are real, or if they occurred by chance. It allows for the determination of the relationship between two sets of data, providing information on both the degree of correlation and the direction.

Writing an evaluation report

A written report of evaluation results is essential for several reasons. The report:

- can help you to critically analyze the results of the evaluation and think about changes that should be made.
- is a tangible product for your agency.
- is evidence that the program or materials have been carefully developed.
- can be used as a "sales" tool for repeating or continuing the program.
- is a record of the activities that can be used to plan future similar programs.
- provides assistance to others who may want to develop similar programs.
- is a foundation for future evaluation activities.

The report should provide a clear, concise record of what was done. It should not be any longer than it need be. Keep it short and easy to read. Instead of describing the data collection instruments, they should be attached. Keep in mind that the report is written in order to be shared with others.

Suggested elements of an evaluation report

Background - this includes the purpose, goals and objectives of the program

Description - explains what was evaluated

Purpose - explains why the evaluation was conducted

Methodology - describes how the evaluation was conducted, including with whom, when, how many, and which instruments were used

Obstacles - explains any problems encountered designing or conducting the evaluation

Results - describes what was found and what application it has to the program

(Aspen Reference Group, 1997)

D. INFERRING IMPLICATIONS FROM FINDINGS

Program Revision

Evaluation allows for a critical appraisal of the program. If it is a continuing program, this opportunity should be used to improve or revise the intervention. Following are suggestions to assist in the process of program revision:

Step 1. Reassess goals and objectives

- Determine if the goals and objectives are still appropriate.
- Has the intervention audience, the community, your agency's commitment changed?
- Do any of the changes require revisions to the original goals and objectives?
- Is there new information about the program's topic that should be added?

Step 2. Determine where additional effort is needed

- Are there objects that were not met? Why?
- Are there strategies that did not work? Why?

Step 3. Identify which program strategies were effective

- Should the effective strategies be continued and strengthened?
- Should the effective strategies be considered completed?
- Can the effective strategies be applied to other populations or situations?

Step 4. Compute cost effectiveness of the different activities

- What were the costs and results of the different activities/aspects of the program, including staff time?
- Do some less costly activities produce similar results to more costly ones?

Step 5. Reestablish program support

- Share the results of the program with the leadership of your agency.
- Share the results of the program with those who contributed to its success, other organizations, individuals, etc.
- Provide evidence of program effectiveness and need to promote continuation of the activities to those whose support is required.

Step 6. Resolve to end a program that was not effective

(Aspen Reference Group, 1997)



NOTES



NOTES

*Responsibility V***COORDINATING PROVISION OF
HEALTH EDUCATION SERVICES**

Coordination is a major component of program implementation. The health educator is responsible for establishing open communication and a supportive climate among individuals and groups who assume the tasks of implementation. Acting as a coordinator means that a person mobilizes and makes sure the necessary resources and services are available and operating in order to promote smooth program implementation. The health educator also develops and conducts in-service training sessions for teachers, nurses, physicians, volunteers and other interested personnel (NCHEC, 1996).

Following are examples of coordination in the different practice settings:

Community Setting: In the community setting, health educators organize task forces to determine the need for education about such problems as alcoholism or sexually transmitted diseases. In facilitating such community task forces, they organize meetings, seek alternative solutions if differing viewpoints emerge, and keep the participants informed on new program developments. Health educators work with other organizations to determine how a particular planned program (e.g., educating for the prevention of child abuse) might be coordinated with their ongoing programs or how program resources could be shared.

Health Care Setting: In the medical setting, a hypertension program has been planned. The health educator's coordination function is to serve as liaison among individuals and groups within the clinic or hospital, explaining how the program will be conducted. This responsibility also includes the preparation of materials for those professionals who will be involved in the program, the scheduling of facilities and equipment, and maintaining open communication among small group facilitators.

School Setting: In the school setting, the health educator coordinates the planning and implementation of the health curriculum, in cooperation with the designated curriculum specialist for the school or district. Since the principal or another school official assigns classrooms, the health educator is not likely to be involved in scheduling facilities. Health educators often arrange for classroom presentations by health organizations and other community agencies.

Workplace Setting: Assume that the accident rate has significantly increased in the past year at an oil refinery plant. The health educator would meet with the occupational safety and medical staff to discuss absenteeism rates, insurance costs, workmen's compensation and related employee morale problems. Further meetings with supervisors, safety engineers, and employee representatives would be necessary to seek solutions to the problem. The health educator obtains or designs an appropriate program, arranges facilities, selects qualified speakers, disseminates promotional materials, and schedules meetings at the most convenient times for employee participation.

(NCHEC, 1996)



Coalitions are groups of people representing different organizations with different agendas and missions who come together to address a common problem or program (Breckon, et al., 1998; Green & Kreuter, 1999).

Community Empowerment is a process that enables a community to set priorities, and control resources in an effort to meet their own needs (Bek, 1998).

Community Organizing is a process that identifies the many aspects of a community's problem and the implementation of a comprehensive plan to address the problem through existing community resources (Whitt, 1998).

Conflict Management is aimed at handling disagreement in constructive ways. Conflict or disagreements are best solved through a systematic procedure with those involved (Whitt, 1998).



COORDINATING

A. DEVELOP PLANS FOR COORDINATING SERVICES

Resource Directory

Health educators must develop plans for coordinating, and facilitating cooperation between various levels of program personnel and organizations, serve as liaison between groups, and organize in-service training.

One of the first steps in the successful coordination of services is to compile or update a community resource directory. Following is a list of general categories and examples of organizations that could be contacted when developing a resource directory:

- | | |
|-------------------------------|--|
| Business and Industry: | Major employers in the community, food establishments, trade groups, Chamber of Commerce |
| Community: | Service organizations, clubs, religious organizations |
| Education: | Colleges/universities, adult education programs, Board of Education |
| Health & Welfare: | Non-profit health agencies, health departments, hospitals, clinics |

(Keyser, et al., 1997)

B. FACILITATE COOPERATION BETWEEN PROGRAM PERSONNEL

Conflict Management

Building interdisciplinary committees and interagency collaboration requires dealing with issues such as goal setting, role expectation, negotiating, decision-making, problem-solving, leadership, and conflict management.

Conflict Resolution

The health educator must understand the nature of conflict. Intrapersonal conflict exists within the individual (such as in cognitive dissonance). Interpersonal and social conflict exists between individuals or groups. Depending on the situation, conflict resolution skills include avoidance and confrontation techniques, bargaining and persuasion strategies, and effective use of communication.

Resolving conflict contributes to positive changes in planning committee member relations, prevents drops in productivity, and frees time for more important issues. Conflict generally arises from four sources:

- (1) real or imagined differences in values
- (2) dissimilar goals
- (3) poor communication
- (4) personalizing generic or organizational issues

Often, conflict resolution means creating a "win-win" outcome. To achieve this, each party must:

- define the conflict as a mutual problem
- pursue joint outcomes
- find creative agreements that satisfy each group
- communicate flexibility of position
- use open, honest, and accurate communication of each group's needs and proposals, avoid threats (to reduce defensive reactions)

(Kennedy, 1998)

Strategies for reducing conflict include:

- Rotating leadership
- Rotating meeting sites
- Using formal group processes to encourage participation by all
- Changing seating arrangements
- Not allowing either-or-thinking
- Distributing relative information as it becomes available
- Identifying areas of agreement and trust
- Taking a break from an emotionally charged topic

(Whitt, 1998)

C. FORMULATE MODES OF COLLABORATION

Guidelines for Coalition Building

Coalitions are generally formed either in response to a grant opportunity or to address a health issue identified through a needs assessment or some other means of recognition. They usually begin with a small core of individuals who constitute the Steering or Planning Committee.

Once the Steering Committee is in place, and the reason for forming the coalition is identified (i.e., a grant or recognized health problem), generally four stages of development follow:

Stage 1 - Preformation

Tasks to be completed during this stage include:

- conducting a needs assessment
- conducting key informant interviews
- identifying community capacity and barriers (Kreuter, Lezin, & Young, 2000)

Although this type of preplanning can enhance the likelihood of a coalition surviving its first year, it may not be feasible for groups that are formed in response to outside funding opportunities.

Stage 2 - Formation

The tasks to be accomplished during the formation stage are:

- defining the mission of the coalition
- recruiting members, obtaining memoranda of understanding from participating organizations, identifying the lead agency's responsibilities
- establishing bylaws, procedures, policies
- developing goals and objectives
- setting future meetings
- electing/appointing a chairperson (Butterfoss, Goodman, & Wandersman, 1996)

Stage 3 & 4 Implementation and Maintenance

Once the coalition is formed, the next tasks to be accomplished include:

- conducting a needs assessment (if one was not done already)
- setting priorities based on the needs assessment data
- identifying activities to achieve the goals
- promoting community awareness of the coalition's activities and the problems it is addressing
- generating additional funds, if necessary (Butterfoss, et al., 1996)

Successful Collaborations

Factors that foster success

The success of the coalition or collaborative entity will be fostered if:

- competent leaders are chosen
- a positive organizational climate is developed
- membership contribution to decision-making is encouraged
- members network outside of the coalition
- membership benefits are maximized
- members are encouraged to be involved in coalition activities (Butterfoss, et al., 1996)

Factors that threaten success

The success of the coalition or collaborative entity will be threatened if:

- goals and expectations are unclear or unrealistic
- the cost to members exceeds benefits
- the coalition becomes a means to resolve conflicts within the community, but does not have the authority or power to make it happen
- the coalition is administered in a top-down fashion
- there are unrealistic time expectations (Kreuter, et al., 2000)



D. ORGANIZE IN-SERVICE TRAINING PROGRAMS

In-service training is an essential ingredient of skills development. The health educator may be involved in the delivery or the coordination of in-service training. Assessment of the gaps and limitations in the desired competencies of the target audience is essential before training can begin. Information collected about previous training efforts, training records, performance evaluations, and information from the intended audience will provide the basis for development of training goals and objectives.

Planning Concerns

The health educator must determine whether training will be delivered using in-house or external resources, or whether a combination of expertise will be used. Such factors as budget, availability of trainers, and time commitments must be considered. If a vendor is to be selected, the vendor's qualifications must be checked and a contractual agreement for delivery of service must be negotiated. If training is to be delivered in-house, the trainers may need to acquire additional skills before delivering the training program. The availability of the target audience, trainers, and the training site must be considered in scheduling training.

Methods and Strategies

A wide range of strategies exist for delivery of in-service training. The health educator should be knowledgeable of various training methods including:

- lecture
- use of print materials
- group leadership and discussion techniques
- video-conferencing
- teleconferencing
- electronic communications
- skills and knowledge testing

The training strategy will usually employ a variety of methods, if possible, because persons internalize knowledge and skills differently with different stimuli. Knowledge of the audience is important in selecting the best methods and strategies. Reinforcement of training concepts is an important strategy. A plan for reinforcement of training concepts can be developed from a review of the training evaluation results.

NOTES

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*Responsibility VI***ACTING AS A RESOURCE PERSON
IN HEALTH EDUCATION**

The setting within which health educators function largely determines the nature of the resources that are provided. Health educators often serve as human clearinghouses for health information. They must be aware of a variety of community resources and familiar with computer-based retrieval systems such as on-line bibliographic databases, ERIC (Educational Resources Information Center), the National Library of Medicine's MEDLINE (PUBMED) and other databases such as the National Health Information Clearinghouse (NHIC). Using resources such as these they can locate, review, select and organize a variety of health education resources to satisfy specific requests.

In working with other health professionals, health educators often serve as consultants, procure educational materials and human resources, and make referrals to appropriate services. They describe the services of community health organizations and associations and advise on the need for and the planning of health education programs (NCHEC, 1996).



Following are examples of being a resource in different practice settings:

Community Setting: In the community setting, health educators might be asked to serve on county-wide drug abuse councils. They would make available data from research studies, recommend relevant literature, suggest audiovisuals and educational pamphlets and posters for distribution, and report on successful drug prevention and intervention programs being conducted elsewhere.

Health Care Setting: A health educator in the health care setting could serve as a consultant to a nursing staff in developing a cancer education program for patients and their families. The health educator organizes a multidisciplinary group to identify needs for patient education materials, sets up a retrieval system for locating relevant materials and evaluates their applicability and effectiveness.

School Setting: A health educator in the school setting would participate in the work of a curriculum committee formed to identify and choose sexuality education materials that would be in compliance with state legislative mandates and school district policies. The health educator might be asked to assist the committee members in examining state laws and codes, establishing criteria for the evaluation of such materials and recommending placement of the topic in the overall curriculum plan. After selection of the material, the health educator might also arrange preview sessions for interested parents.

Workplace Setting: Physical fitness/exercise programs are frequently featured in workplace health promotion programs. As a resource person, the health educator would be responsible for explaining to both employers and employees the costs and benefits of such exercise programs. Health educators can identify and organize resources needed for the implementation and continuation of the fitness or other health promotion programs. They can identify research data to present to concerned personnel such as the corporate medical staff, and monitor the plans of those responsible for conducting the exercise program, to ensure that its activities match the stated objectives.

(NCHEC, 1996)



Consultation is the process by which the knowledge of one person is used to help another make better decisions (Simons-Morton, et al., 1995).

Informal consulting is a type of consulting that does not require a written agreement or formal contract. Informal consulting consists of acting as a resource person responsible for organizing health education materials, and responding to requests for health education information and literature/materials (Simons-Morton, et al., 1995).

Formal consulting requires a contract or written agreement between the two parties, client and consultant. A formal consultant is hired for his/her expertise in that particular area on which the client needs assistance, advice, etc. Formal consulting follows the steps of diagnosis, recommendation, action, evaluation, and termination (Simons-Morton, et al., 1995).

ACTING AS A RESOURCE

A. UTILIZE COMPUTERIZED HEALTH INFORMATION RETRIEVAL SYSTEMS

Health information can be obtained from a variety of sources, including professional association journals, textbooks, government publications (local, state and federal), colleges/universities, medical centers, professional conferences, and the Internet, to name a few.

The following are examples of computerized sources of health information:

Databases

Medline - This database primarily contains medical journals, although many of the health education journals are also indexed. This is available online as "PubMed" through the National Library of Medicine (NLM). The basic information provided is in the form of article abstracts although, for some, there are links to retrieve full text documents. This database can be accessed at [http:// www.ncbi.nlm.nih.gov/PubMed](http://www.ncbi.nlm.nih.gov/PubMed)

ERIC (Education Resource Information Center) - This database contains journals related to school health, school-aged children, and education in its broadest sense. Much of the information found in ERIC is in the form of ERIC documents which are on microfiche in any large library, especially at a college or university. ERIC documents are often-times proceedings from conferences, policies, etc., materials that are not found in the journal literature per se. This database can be accessed at <http://www.accesseric.org>

CHID (Combined Health Information Database) - This database is produced through the combined efforts of the Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), Office of Disease Prevention and Health Promotion (ODPHP), and the Health Resources and Services Administration (HRSA). It provides descriptions of health education and health promotion programs in progress, at the state and local levels, bibliographic citations and abstracts of journals articles (some full-text articles), books, reports, pamphlets, audiovisuals and other. This site can be accessed through the Internet at <http://www.chid.nih.gov> (Breckon, et al., 1998).

CINAHL (Cumulative Index for Nursing and Allied Health Literature) - This is a database for health education information. The major health education journals are indexed here, as well as journals from many other health disciplines.

Internet Sources of Health Information

There are a vast number of websites for health information. Due to ever changing web addresses, individual sites are not being provided here. Instead, they can easily be accessed by using anyone of the many search engines available and typing in the health problem of interest. Many of the sites for health information can also be accessed through the federal government's Health Finder site at <http://www.healthfinder.gov>

Sources for Professionals to Find and Share Information

HEDIR (The Health Education E-mail Directory) is a listserv of health educators throughout the world. It is an electronic communications system for news, and commentary for professionals and students in the field of health education. Participation is free. For more information, e-mail Dr. Mark J. Kittleson at kittle@siu.edu

HEPR (Health Education Professional Resources) is a New York University website containing a comprehensive collection of information of special interest to health educators to facilitate professional practice and to students in health education to learn about the profession. Current categories of information are: What's New, bulletin board services, health-related organizations, job postings, listservs and other mailing lists, national credentialing agencies, professional associations, professional calendar, professional opportunities, professional preparation programs, and resources for health education. The URL for HEPR is <http://www.nyu.edu/education/hepr>. For more information, e-mail Dr. Alyson Taub at alyson.taub@nyu.edu

Professional Associations

American Association for Health Education (AAHE)

1900 Association Drive

Reston, VA 20191

(703)476-3437

<http://www.aahperd.org>

Publications: *Journal of Health Education*
HE-XTRA (newsletter)

The American Association for Health Education is part of the larger American Alliance for Health, Physical Education, Recreation and Dance which comprises more than 43,000 professionals in sports, dance, safety education, physical education, recreation and health education. AAHE has membership of more than 7,500 professionals from schools, universities, community health agencies, and voluntary agencies. It promotes comprehensive health education programming in schools, colleges, and community settings. AAHE has a full-time staff that maintains close contact with legislative issues in Washington, D.C.

American College Health Association (ACHA)

780 Elkridge Landing Road

Linthicum, MD

(410) 859-1500

<http://www.acha.org>

Publication: *Journal of the American College Health Association*

The American College Health Association is made up of individuals and institutions of higher education dealing with health problems and issues in academic communities. It promotes continuing education, research, and program development related to educational institutions.

American Public Health Association (APHA)

800 I Street NW

Washington, DC 20001-3710

(202) 777-2742

<http://www.apha.org>

Publications: *American Journal of Public Health*

The Nation's Health (newsletter)

The American Public Health Association is the largest and oldest public health membership organization in the United States with over 30,000 members. It represents the major disciplines and specialties related to public health. APHA has two sections of primary interest to health educators: The Public Health Education and Health Promotion Section, and the School Health Education and Services Section.

The Public Health Education and Health Promotion Section is one of the larger sections of APHA. It is concerned with articulating health education roles and advocating for health education concerns throughout the overall APHA organization and its various sections and state affiliates. It also monitors association policy for health education content, accuracy and inclusion where appropriate.

The School Health Education and Services Section advocates within the APHA structure for comprehensive school health. Such input includes the traditional areas of health instruction in schools, school health services and healthful school environments.

American School Health Association (ASHA)

P.O. Box 708

Kent, OH 44240

(303) 678-1601

<http://www.ashaweb.org>

Publication: *Journal of School Health*

Pulse (newsletter)

The American School Health Association is the primary professional organization concerned with issues related to school-age children. There are approximately 3,000 members in the organization. School health services, healthful school environment, and comprehensive school health education are key areas of concern. ASHA provides leadership in professional preparation and practice standards for school health educators, school nurses, physicians and dental personnel.



Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPE)

750 1st Street NE Suite 1050

Washington, DC

(202) 312-6461

<http://www.astdhppe.org>

Publication: *ASTDHPPE Newsletter*

The Association of State and Territorial Directors of Health Promotion and Public Health Education membership is made up of 65 directors of health education for each state or territory and the Indian Health Service of the U.S. The Association is primarily concerned with developing standards for health education programming at the state level. The Association is an affiliate of the Association of State and Territorial Health Officials.

Association for Worksite Health Promotion (AWHP)

60 Revere Drive, Suite 500

Northbrook, IL 60062

(847)480-9574

<http://www.awhp.org>

Publication: *Worksite Health Promotion*

The Association for Worksite Health Promotion is a membership organization of worksite health promotion professionals dedicated to sharing the best of practice methods, processes, and technologies appropriate to business and industrial settings.

Eta Sigma Gamma

2000 University Avenue

Muncie, IN 47306

(800) 715-2559

<http://www.cast.ilstu.edu/temple/esg.htm>

Publication: *The Health Educator*

The Health Education Monograph Series

Vision (newsletter)

Eta Sigma Gamma is the national health education honorary. Its primary purpose is the furthering of the professional competence and dedication of members of the health education profession. It focuses on teaching, research and service.

International Union for Health Promotion & Education (IUHPE)

6, rue Auguste Comte

92170 Vanves, France

Telephone - (33) 01 46 45 00 59

<http://www.iuphe.org>

Publication: *Promotion & Education*

Narnews (newsletter)

The International Union for Health Promotion and Education is an independent professional association of individuals and organizations that for nearly 50 years has been committed to improving the health of the people of the world through education, community action and the development of public policies. With more than 2,000 members in over 90 countries, IUHPE is the only global non-governmental organization that provides an opportunity to build an international network to encourage the free exchange of ideas, knowledge, technical skill, and experience.

The IUHPE decentralizes its activities through regional offices. It works in close cooperation with WHO, UNESCO, UNICEF and other major intergovernmental and non-governmental organizations to influence and facilitate the development of health promotion strategies and projects.

Society for Public Health Education (SOPHE)

750 First Street NE, Suite 910

Washington, D.C.

(202) 408-9804

<http://www.sophe.org>

Publications: *Health Education and Behavior*

Health Promotion Practice

News and Views (newsletter)

The Society for Public Health Education is an independent international professional organization that provides leadership to the profession of health education and contributes to the health of all people through advances in health education theory and research, excellence in health education practice, and promotion of public policies conducive to health. SOPHE has local chapters throughout the United States that provide, among other things, continuing education, and employment referrals.



Society of State Directors of Health, Physical Education, and Recreation (SSDHPER)

Contact: Individual State Department of Education

The Society of State Directors of Health, Physical Education and Recreation membership is limited to directors of school health, physical education and recreation in state agencies. Its goal is to promote comprehensive statewide programs of school health, physical education and recreation. The Society works closely with AAHPERD.

Coalition of National Health Education Organizations (CNHEO)

The address and phone number are in association with the current chairperson. Contact any of the member organizations for further information.

The Coalition includes representatives from the following associations: American College Health Association (ACHA); American Public Health Association (APHA) Public Health Education and Health Promotion Section, and the School Health Education and Services Section; American School Health Association (ASHA); American Association for Health Education (AAHE); Association for State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPHE); Society for State Directors of Health, Physical Education and Recreation (SSDHPER); Society for Public Health Education (SOPHE). The Coalition attempts to unify the vision, standards, and objectives for the profession and ensures that health education is appropriately represented in national discussion, decisions and policy development.

Other Selected Professional Journals

American Journal of Health Behavior

PNG Publications

P.O. Box 4593

Star City, WV 26504

(304) 293-4699

<http://www.ajhb.org>

American Journal of Health Promotion

810 East 10th Street

Lawrence, KS 66044

(785) 843-1235

<http://www.healthpromotionjournal.com>

American Journal of Health Studies
720 Energy Center Blvd, Suite 505
Northport, AL 35473
(800) 285-5293
<http://www.Healthes.com>

Health Education Research: Theory & Practice
Oxford University Press
2001 Evans Road
Cary, NC 27513
(919) 677-0977
<http://www.oup-usa.org>

International Quarterly of Community Health
Baywood Publishing Co.
26 Austin Avenue
P.O. Box 337
Amittyville, NY 11701
<http://www.baywood.com>

Patient Education and Counseling
Elsevier Science Publications
655 Avenue of the Americas
New York, NY 10010
(212) 989-5800
<http://www.elsevier.com>

B. ESTABLISH CONSULTATIVE RELATIONSHIPS

Consultants

The purpose of consultation is to establish a helping relationship. This relationship is permissive, supportive, voluntary, temporary, disciplined and interactive. It is a two-way process that is initiated by the consultee. To be an effective consultant takes technical expertise and empathy.

Six phases of consultation

1. *Contact entry*: The consultant is contacted and agrees to enter into the consultative relationship.
2. *Contract and establish relationship*: The formal contract is developed and the process of consulting begins.
3. *Problem identification and analysis*: The issue to be addressed is determined.
4. *Goal setting and planning*: Realistic goals for addressing the issue are set, and a plan to achieve the goals developed.
5. *Implementing the plan and cycling feedback*: Undertaking the actions identified and evaluating their effectiveness in addressing the issue and reaching the goals.
6. *Contract completion*: Review accomplishments, and design plans for continuity.

C. RESPOND TO REQUESTS FOR HEALTH INFORMATION

Identifying Information

Regardless of what information retrieval system is used, the steps used to identify the type of information needed and to conduct a search of the literature are as follows:

- identify needs
- match the need to likely sources
- pursue leads
- judge the quality and quantity of the information found
- organize the available materials in the format most useful to the user in terms of categories, cross-references, and lists.

Along with the Internet sources previously discussed, relevant health information may be available through local, state, and national organizations. A useful resource for this information is the *Encyclopedia of Associations*, and self-help resource directories found in the library.

D. SELECT EFFECTIVE EDUCATIONAL RESOURCES

Guidelines for Evaluating Websites

1. **Determine who maintains the site.** Government or university-maintained sites are among the best sources for health and medical information.
2. **Look for an editorial board** What are the credentials of these people, can they be contacted through e-mail or by phone?
3. **Look for links to other websites with medical/health information.** Reputable organizations will not claim to be the sole source of information on a particular health topic.
4. **Notice when the site was last updated.** The more recent the update, the more likely the information is current. Ideally, health/medical sites should be updated weekly, if not, at least monthly.

(Larkin, 1996)

Selecting Materials

In addition to knowing where to find and how to access health information, the health educator must also be able to evaluate the usefulness of the materials for the given population, group or client.

Following are some suggestions on how to select the appropriate materials.

1. Does the material have audience appeal?
2. Does it get the reader's attention and keep attention?
3. Is the information accurate and up to date?
4. Is it logical, clearly developed and easy to follow?
5. Is it complete? Is there sufficient information, or too much or too little?
6. Is the message supportive, positive, personal?
7. Is the physical appearance (i.e., color, layout, print, illustrations) appropriate for the audience?
8. Are the graphics simple, clear, and compatible with the text?
9. Is the vocabulary appropriate for the audience? Are new terms defined and has jargon been avoided?
10. Is the reading level appropriate for the audience?

(Breckon, et al., 1998)

Determining Reading Level

Just as important as the processes used to plan and implement a health communications intervention, is having the message at a reading level most appropriate for the audience. Materials/messages developed for the general population should be at a fifth or sixth-grade reading level. When developing new materials, word processing programs can provide this information. However, with previously printed materials, a quick and easy method of assessing the reading level is to use the SMOG Readability Formula (USDHHS, 1989).

To SMOG written material:

1. Locate 30 sentences: 10 consecutive sentences at the beginning, 10 in the middle and 10 at the end.
2. Circle all of the words in these 30 sentences that contain three or more syllables. Include all of the following if they are three or more syllables: repetition of words, proper nouns, numbers both written out or in numeric form, abbreviations (read out loud to determine if they are polysyllabic), hyphenated words.
3. Count all of the circled words.
4. Based on the total number of words circled, use the SMOG Conversion Chart to determine the readability.

SMOG Conversion Chart

Total number of polysyllabic words Approximate Grade Level (+/- 1.5 grades)

0-2	4
3-6	5
7-12	6
13-20	7
21-30	8
31-42	9
43-56	10
57-72	11
73-90	12
91-110	13
111-132	14
133-156	15
157-182	16
183-210	17
211-240	18

(Developed by Harold C. McGraw, Office of Educational Research, Baltimore County Schools, Towson, Maryland.)

Low Literacy

When developing materials for an audience with low literacy, the following guidelines are offered:

1. Use an active, rather than passive, voice
2. Use terms that are familiar to the target group
3. Use short sentences and paragraphs
4. Sequence the information from simple to complex, or prioritize the information
5. Organize it so that it is interesting, catches the eye, and highlights the message
6. Use graphics that are easy to understand and that support/enhance the message

(Meyer & Rainey, 1994)

NOTES

*Responsibility VII***COMMUNICATING HEALTH AND HEALTH
EDUCATION NEEDS, CONCERNS, AND RESOURCES**

Health educators provide information regarding health and health education to a varied market of health providers, consumers, learners, employers and colleagues. They do this through mass communication techniques, and individual and group processes. Health educators, in interpreting health information needs and concerns, utilize their professional backgrounds in the behavioral and biological sciences. They articulate the purposes, theories, concepts, and processes of health education to others in a manner appropriate to the setting in which they practice. The health educator, taking into consideration the multitude of value systems represented in our society, uses a variety of educational strategies in communicating health information (NCHEC, 1996).

Following are examples of how communication is used in different practice settings:

Community Setting: A health educator might be asked to be responsible for collecting, refining and organizing data for advisory council meetings. The information might be transmitted by means of written reports, slide presentations, or by charts and graphs. As a staff member, a health educator would be expected to make the information quickly available and easily comprehensible for use by council members in their decision-making process.

Health Care Setting: Suppose a health maintenance organization decides to establish a prenatal education program for subscribers in need of such information. The health educator would be involved in communicating the need for such a program to various members of the medical staff and to the subscriber population of the HMO. For example, the health educator would be asked to prepare brochures to advertise the program and develop posters and flyers for distribution to each clinic as a means of explaining the program objectives and proposed activity schedules. The health educator, as a specialist in curriculum/program development and implementation, would play a major role in designing the instructional elements of the program.

School Setting: A health educator in the school setting may be asked to present the school district's health education curriculum to the PTA, school board or community citizen groups. An explanation of curriculum goals and objectives would likely precede a description of the philosophical basis of the program. In making a public presentation, the health educator might use videotapes of classroom instruction, transparencies listing program objectives and handouts of sample lesson plans to illustrate key aspects of the plan.

Workplace Setting: In the workplace setting, the management of high technology business endorses the establishment of a training program to help mid-level managers to cope more effectively with stress-related health problems. A health educator would be expected to explain to those managers the company's concern for their well being and their perceptions of its cost effectiveness as well. In turn, the health educator might relay to the executive level whatever concerns or interests the managers would have expressed relative to the proposed program.

(NCHEC, 1996)



Advocacy is actively working to make a change in society, that is, changing the social, political, legal economic or medical environments (Ward & Koontz, 2000).

Enter-education or "edutainment" combines entertainment and education to bring about positive changes in attitude and behavior. Edutainment influences social norms and fits with media's powerful effect in the transmission of culture (Steckler, et al., 1995).

Public relations is the use of various communication strategies, over a long period of time, aimed at establishing credibility and enhancing an organization's reputation (Breckon, et al., 1998). Public relations in health education seeks to increase awareness and improve opinions of health issues, programs, services, and agencies (Schadewald & Rutherford, 1998).

Marketing is concerned with determining what people want or need. It has a consumer rather than provider orientation (Breckon, et al., 1998).

Media advocacy is the strategic use of mass media as a resource for advancing social or public policy initiatives (Wallack, Dorfman, Jernigan, & Themba, 1993).

Theory is used to explain the ways, processes or mechanisms by which behavior is affected (Glanz et al., 1997).

A. INTERPRET FOUNDATIONS OF HEALTH EDUCATION

Theories and Models

The following are examples of health education concepts, theories and models. This is not meant to be all inclusive, but rather a sampling of those more commonly used.

Health Belief Model

A person who (1) perceives a certain condition (that a recommended behavior is said to prevent or minimize) to be a threat (because the condition is serious and the person feels susceptible to it), (2) is cued by people or messages in the environment to do the behavior, (3) has confidence in his ability to carry out the behavior and (4) believes the benefits of doing the behavior outweigh the disadvantages, barriers or negative consequences is more likely to do the behavior than someone without those beliefs (Hochbaum, 1958; Rosenstock, 1974).

Theory of Reasoned Action

A person who (1) thinks a recommended behavior produces a certain outcome and feels that outcome is desirable (Attitude), and (2) knows what important people in his/her life (people whose opinion on this matter really counts) feel about this recommended behavior, and is sufficiently motivated to comply with those people (Subjective Norm) will (3) intend to make a behavior change, and therefore, (4) will make the behavior change. The relative importance of Attitude and Subjective Norm varies depending upon the population involved and will influence behavioral intention (Ajzen & Fishbein, 1980).

The Theory of Planned Behavior

Based on the Theory of Reasoned Action, this theory adds one other factor to the mix: Perceived Behavioral Control. A person who (1) thinks a recommended behavior produces a certain outcome and feels that outcome is desirable (Attitude), (2) knows what important people in his/her life (people whose opinion on this matter really counts) feel about this recommended behavior, and is sufficiently motivated to comply with those people (Subjective Norm), and (3) has high self-efficacy (a subjective sense of self-confidence) in his/her ability to change and a high objective sense of control over the conditions (facilitating and constraining) that affect intention and behavior (Perceived

Behavioral Control) will (4) intend to make a behavior change, and, therefore, (5) will make the behavior change (Ajzen, 1988).

Transtheoretical Model/Stages of Change

Behavior change is a process that can be triggered by the use of "stage matched interventions" as follows: If a client is unaware that he or she has a problem and has no intention of taking action in the next 6 months (Pre-contemplation), the appropriate intervention is to increase client awareness of need for change and personalize information on risks and benefits, while increasing and promoting the benefits of changing. If the client is thinking about changing in the near future and intends to take action within the next 6 months (Contemplation), motivate the client, encourage specific plans, and decrease and reduce the consequences of changing. If the client is making plans to change, intends to take action within the next 30 days and has taken some behavioral steps in this direction (Preparation or Commitment), assist the client in developing an action plan and setting goals. At this point, the pros/benefits must be perceived as outweighing the cons/costs/risks. If the client is implementing a specific action plan/is changing and has changed overt behavior for less than 6 months (Action), provide the client with feedback, social support, reinforcements and help with problem-solving. If the client continues to do the desired action or is repeating periodic recommended step(s) and has changed overt behavior for more than 6 months (Maintenance), then help the client prepare for, avoid or handle relapse, help with coping, reminders, finding alternatives when faced with behavior-related challenges and continue Action-matched interventions. If the client has been doing the new behavior for so long the client can hardly remember doing or can hardly imagine ever having done the old behaviors (Termination), continue providing, as necessary, Maintenance-matched interventions (Prochaska & DiClemente, 1983).

Social Cognitive (Learning) Theory

Rather than put the onus of behavior change on the knowledge, attitudes, and skills of the individual whose behavior we want to change, Social Cognitive Theory assumes that there is a connection, an interdependence, among (1) the characteristics of the person whose behavior is targeted for change, (2) the attributes of the behavior itself and (3) the environment in which the behavior is to take place. This is called Reciprocal Determinism. Behavior depends upon the characteristics of the person, the behavior and the environment. Changing behavior depends on changing one or more of those three factors. If a person has three things: (1) confidence in his ability to perform a new behavior (self-efficacy), (2) the skills and knowledge necessary to perform that behavior (behavioral capability) and (3) a strong belief in the value of the expected outcome(s) of the new behavior (outcome expectancy), the more likely that person is to (1) decide to adopt the recommended behavior, (2) put effort into doing the new behavior, and (3) persist in doing the new behavior, than someone without these three characteristics. The theory

recommends specific strategies for increasing behavioral competence (direct and vicarious experience), self-efficacy (personal mastery of the task), observing the performance of others, receiving suggestions from others, and dealing with emotions triggered by thoughts of the change and outcome expectancies (direct, vicarious, and self-managed rewards) (Bandura, 1977).

Diffusion of Innovation

Five key factors influence whether or not and at what rate an innovation will be diffused within a system: (1) individual characteristics of the prospective adopter. Is the adopting unit a member of the "innovator," "early adopter," "early majority," "late majority," or "laggard" adopter category? (2) the environmental context into which health educators introduce the innovation; (3) the change agent who is promoting the innovation. Is the person credible, trusted, respected, liked and associated with a sponsoring agency that has those same characteristics? (4) the quantity and quality of information and communication about the innovation available to the adopters; (5) characteristics of the innovation itself. Is the new behavior perceived by the client as superior to the current behavior or inactivity (relative advantage)? Is the new behavior perceived by the client as compatible with client needs, values and experiences (compatibility)? Is the new behavior perceived by the client as easy to do (complexity)? Is the new behavior perceived by the client as divisible, i.e., able to be implemented one step at a time (trialability)? Is the new behavior perceived by the client as producing immediately observable results (observability)? Additional important concepts include adoption curve, the idea of adoption curve thresholds, and the innovation-decision process (Rogers, 1994).

Empowerment

Empowerment Theory suggests that a problem-posing process can help clients overcome their sense of powerlessness, thus freeing them to make healthy choices. If members of a population (1) come together to see a dramatic presentation by group members in the form of role-plays, stories, slides, photographs, or songs, (2) participate actively in an open-ended problem-solving dialogue about those issues raised by the drama (by participating in a facilitated five-step process which includes: asking individuals to describe what they see in the representation and what feelings it calls up; defining, as a group, the many levels of the problem; sharing similar experiences from their lives; questioning why this problem exists; and developing an action plan to address the problem), and (3) implement that action plan that addresses the problem at a community level, behavior change will happen eventually. The most important result is permanent personal and community development (Freire, 1973; Wallerstein & Bernstein, 1988).



Stage Theories

There are many organization-based Planned Change Implementation theories. Most of them are based on "stage theories" which assume that organizational change requires progress through a series of stages: (1) sensing unsatisfied demands on a system; (2) searching for possible responses; (3) evaluation of alternatives; (4) decision to adopt a course of action; (5) initiation of action within the system; (6) implementation of the change; (7) institutionalization of the change and (8) change re-evaluation. The change agent's job is to facilitate four procedures: problem diagnosis, action planning, intervention, and evaluation, using specific organizational development techniques (Goodman, Steckler & Kegler, 1997).

Community Organizing Models

Community organizing (a process in which community groups identify problems, mobilize resources, design and implement strategies to achieve common goals) can focus on solving immediate problems, building a sense of community and community capacity, and/or redistributing power and resources. If the primary concern is short-term problem-solving, the social planning model suggests using a task-oriented approach that involves calling in an outside technical expert. If the goal is to foster a sense of community and to build skills, the locality development model, a collaborative, consensual, process oriented approach, suggests involving a broad cross section of people from the community in task forces to determine and solve community problems. If the primary concern is about shifting power relationships and resources within a community, social action, a more confrontational, conflict-oriented model may be appropriate. Often, situations call for the use of a combination of these models. Newer models focus on collaborative empowerment, community regeneration, community building, culture, and coalition building. They promote building on the strengths and gifts of communities and their members/groups (Rothman & Tropman, 1987; Minkler & Wallerstein, 1999).

Media Advocacy

To achieve behavior change to a truly significant degree, it is often more effective to address the policy that drives the problem rather than the problem itself. Public concern can be stimulated and policies changed by (1) taking the initial perception of a health problem and (2) redefining or reframing it to focus on a related policy rather than personal behaviors, (3) presenting it to the media in this new light, (4) providing supporting information and feature/news stories, (5) being accessible for questions from media representatives, (6) and reinforcing this different perception of the original health problem (Wallack, 1990).

Historical Foundations of Health Education

There are many people and events that have shaped health education as a profession, with many more continuing to do so. Following is a sampling of some important milestones in the history of the profession:

**Historical Events
of Health Education**

Year	Event
1798	U.S. Public Health Service began as the Merchant Marine Hospital Service.
1815-1818	Local health departments began in a number of cities.
1837	Horace Mann, Secretary of the Massachusetts Board of Education. His Annual Reports campaigned for mandatory programs of hygiene instruction in the schools.
1850	Lemuel Shattuck wrote his Report of the Sanitary Commission of Massachusetts aka the Shattuck Report, which called for the teaching of 'physiology' in schools.
1901	Thomas Wood, MD, (Father of Health Education) established the first professional preparation program in hygiene at Columbia University.
1918	The American Child Health Association was established. This is considered to be the beginning of the health education movement. It was this organization in 1919 that first used the term health education rather than hygiene, with the first Director of this organization, Sally Lucas Jean, coining this terminology. Its members believed that rather than teaching basic hygiene and memorization of facts, people should be taught to make decisions about their health behavior.
1921	Harvard-MIT started first Masters in Public Health (MPH) program.
1922	Public Health Education section of APHA founded.

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- 1924 Publication of *Health Education, A Program for Public Schools and Teacher Training Institutions* by the Joint Committee of the NEA and AMA. This was a report of research on the school health program and its major curricular issues.
- 1929-31 Delbert Oberteuffer conducted one of the most significant early studies in health education, the Ohio Research Study. The study attempted to discover students' health needs and interests and to use this information as the basis for curriculum development.
- 1931-36 The Cattagaus Study conducted by Ruth Grout was a three-phase study that evaluated the effects of health education on student health behavior, the effects of a health program on the school environment (especially sanitary and hygiene conditions) and demonstrated the value of in-service education in health for teachers.
- 1937 Health education division of the American Association for Health, Physical Education, and Recreation was formed.
- 1942 The Astoria Study published by Dorothy Nyswander. The results of the study were focused on the team approach (parents, teachers, and school nurses) to improving the health of children. The study led to cooperation and interaction among school screening methods, health instruction, and curriculum; school health personnel ratios; and staff training.
- During WWII the Communicable Disease Center was established. It grew as it added responsibilities and is now identified as the Centers for Disease Control and Prevention.
- 1948 The National Conference on Undergraduate Professional Preparation in Health Education, Physical Education, and Recreation was held in West Virginia. The results of this conference were the development of a list of personal qualifications for successful leadership in health education and a list of general competencies for the health educator.
- 1949 The First U.S. Office of Education Conference on Undergraduate Professional Preparation of Students Majoring in Health Education was held in Washington D.C. The outcome of this conference was the familiarization of professionals in the field with the state of art in health education as it was being taught in professional preparation programs.
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- 1950 The Society of Public Health Educators (SOPHE) was founded.
- The National Conference on Graduate Study in Health Education was held in Illinois. This conference resulted in the establishment of guidelines for professional preparation at the graduate level.
- 1962 The School Health Education Study was conducted by Elena Sliepcevich. This was a landmark study, with one million children nationwide participating. It identified what school children knew about health and initiated the writing of the first comprehensive K-12 school health curriculum.
- 1965 Medicare and Medicaid were enacted.
- 1971 SOPHE changes its name from the Society of Public Health Educators to the Society for Public Health Education.
- 1974 The Bureau of Health Education (now the Center for Health Promotion) was established at the Centers for Disease Control.
- Association for the Advancement of Health Education (AAHE) was formed within AAHPERD. (AAHE changed its name in 1996 to the American Association for Health Education).
- 1975 The National Center for Health Education was established in the private sector. This Center's function was to promote health education.
- CDC conducted a study of premature deaths in the US. The results indicated that 48% of these deaths could be traced to lifestyle or health behavior.
- Council on Education for Public Health (CEPH) (originally part of APHA) became an independent accrediting body for schools of public health, preventative medicine programs, and graduate programs in community health education.
- 1976 Code of Ethics developed by SOPHE.
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- 1978 A conference on the Commonalities and Differences in the Preparation and Practice of Health Educators was held in Bethesda, MD. The National Task Force on the Preparation and Practice of Health Educators was established at this conference.
- 1978 The Role Delineation Project began.
- Surgeon General's Report on Healthy People provided the basis for the 226 health objectives found in the document *Promoting Health/Preventing Disease: Objectives for the Nation*.
- 1980 Office of the Director of Health Information and Promotion in Washington, D.C. Bureau was responsible for coordinating implementation of the Surgeon General's Report *Healthy People*.
- Role verification process began.
- 1981 The National Conference for Institutions Preparing Health Educators was held in Birmingham, AL. The role of the health educator was refined, and the need for a competency-based curriculum was identified.
- 1985 *A Framework for the Development of Competency-Based Curricula for Entry Level Health Educators* was published.
- 1986 Second Bethesda Conference was sponsored by the National Center for Health Education, and the National Task Force on the Preparation and Practice of Health Educators. The result of this conference was the identification of certification as the means of individual credentialing in health education.
- 1988 National Commission for Health Education Credentialing, Inc. was established.
- 1989 SOPHE/AAHE Baccalaureate Approval Joint Committee (SABPAC) was established to develop a process for approving undergraduate programs based upon specific criteria. One of the outcomes was it unified the profession and helped to raise standards.
- 1989 Charter phase of certification implemented - 1558 health educators were certified.
- 1990 First certification examination administered.
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- 1991 Joint Committee on Health Education Terminology (AAHE, SOPHE, and representatives from health education and medically-related organizations). The Committee updated and expanded a previous 1973 report and developed a comprehensive listing of terms used in the field.
- 1992 SOPHE/AAHE Joint Committee for the Development of Graduate-Level Preparation Standards was established. Members of this committee were to identify the competencies needed for practice beyond those of entry level.
- 1994 AAHE develops a Code of Ethics.
- 1995 Public Health Education Training and Leadership Institute is organized in conjunction with SOPHE, ASTDHPPE, Centers for Disease Control. It offers a one-year competency-based program aimed at increasing the capacity of leaders to enhance performance of public health functions and services.
- Conference on Health Education in the 21st Century (CNHEO's, NCHEC, health education institutes, government health agencies, and voluntary health organizations). Addressed pooling their efforts to work more effectively for priorities within the profession. It identified comprehensive school health education within a coordinated program, tobacco use reduction and prevention, and advocacy training for leaders of the various groups.
- 1996 Association for the Advancement of Health Education changes its name to the American Association for Health Education.
- 1996-97 Graduate competencies accepted by professional consensus at a meeting in Dallas, TX.
- 1997 Standard Occupation Classification (SOC) Policy Review Committee granted approval for the creation of a new classification for the occupation of health educator. By 1998 the new SOC System was finalized. The way was paved for collecting the first national statistics on the health education workforce.
- 1998 Competency Update Project began.
- 2000 Code of Ethics for the Health Education Profession was adopted.
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B. PREDICT THE IMPACT OF SOCIETAL VALUES

Ethics

Health educators work with very diverse populations. Often, the values of the intervention population affect the planning and implementation of programs. To provide the best possible health education programming to the diverse populations we serve, and in an effort to increase program success while avoiding conflicts of cultural, values and beliefs, practicing within professional parameters is essential. To this end, health educators are bound professionally to adhere to the guidelines set forth in the Code of Ethics for the Health Education Profession (Appendix A) Article I, Responsibility to the Public which states that:

“A health educator’s ultimate responsibility is to educate for the purpose of promoting, maintaining and improving individual, family, and community health. When a conflict of issues arises among individuals, groups, organizations, agencies, or institutions, health educators must consider all issues and give priority to those that promote wellness and quality of living through principles of self-determination and freedom of choice.”

In an effort to prevent controversy, it is important to have broad representation on the planning committee at the local level; know your population, its values, beliefs, customs; seek support of important key people in the community, select an articulate, respected spokesperson; have clearly defined program goals and objectives (Keyser, et al., 1997).

If controversy occurs, dealing with it in the following manner may be useful:

- be honest about your interpretation of the situation
- remain objective, don’t get defensive
- keep supporters involved and informed
- communicate program goals in a positive manner
- listen to opposing views and identify a common ground
- respect differences

(Keyser, et al., 1997)

C. SELECT COMMUNICATION METHODS AND TECHNIQUES

Health Communications

Health communications programs can increase awareness of a health issue, problem or solution, affect attitudes to create support for individual or collective action, demonstrate or illustrate skills, increase demand for health services, and remind about or reinforce knowledge, attitudes, or behavior. Health communications programs cannot compensate for a lack of health care services, produce behavior change without supportive program components, or be equally effective in addressing all issues or relaying all messages.

Theories and models used in planning health communications programs come from social marketing, health education, and mass media. Social marketing is defined as a combination of social change approaches and product marketing (Simons-Morton, et al., 1995).

Product marketing: There are four aspects of product marketing commonly referred to as the four Ps. They are product, promotion, place and price.

Product: In health education, the product is the program.

Price refers to the amount charged to attend or participate in the program. When considering how much to charge for the product being offered (the program) the price must match the participants' ability to pay.

Place can be thought of as distribution of the product or where the program is held. Proper placement is essential to program success. A location that is seen as unsafe, undesirable, difficult to reach, etc., will not contribute to program success.

Promotion is analogous to advertising the program.

(McKenzie & Smeltzer, 1997)

Marketing Process: This model is composed of the following six sequential stages: market analysis, planning, materials development and testing, implementation, assessing effectiveness, and feedback to refine program.

Market analysis includes an economic appraisal of the behavior, the geographic scope of the market population, behavioral trends, and an assessment of the resources available for conducting the program.

Planning consists of establishing the program structure and organization, objectives, target audience, means of promotion/advertising, and the marketing mix of the four Ps, including the action plan, schedules, process and outcome measures and budget.

Developing and testing materials is the first step in implementing the action plan. Each aspect of the marketing mix is developed and tested.

Implementation is the stage when the program is fully activated.

Assessing effectiveness encompasses an ongoing process evaluation, and the determination of how and if the program is meeting its objectives.

Feedback for refinement takes into account changes in the marketplace, target audience responses to the program, the organization, objectives, and budget. All of these changes, along with the evaluation data, are used to identify program problems, weaknesses, strengths and highlights to be used for improvement.

(Novelli, 1997)

The Health Communication Process

Planning and strategy selection involves studying the health problem and target population, determining objectives, deciding what message the target population needs to hear.

Selecting channels and materials is concerned with choosing the communication channel/ media most appropriate for the audience (at the work-site, mass media), and the format (newsletter, pamphlet, etc.).

Developing and pretesting materials with the target population is done to obtain feedback and to make changes where necessary.

Implementation of the project begins, and progress is monitored to ascertain if alterations are needed.

Assessing effectiveness is based on the objectives identified in the first stage.

Feedback to refine program uses information obtained from all of the previous stages to improve the communication effort.

(UDHHS, 1989)

Working with the Media

The media (newspapers, radio, television, etc.) is useful in raising awareness and interest in a program. To be effective, there needs to be a careful match of the media chosen, the message, and the audience. Following are suggested guidelines for identifying when to use mass media:

Mass media is appropriate when:

- the message is simple and factual
- the desired change is not radically different than what is already practiced
- the audience is highly educated
- the behavior change is short term

Mass media is not appropriate when:

- the message is complex
- extensive behavior change is needed
- the audience has low education levels
- long-term change is desired

(Breckon, et al., 1998)

Press/News Releases are commonly used means to promote a program or event via the newspaper or other print media. They should be current and pertain to local events. The standard format for writing a press/news release includes the 'Who, What, When, Where, and Why' of the program in the first paragraph. Subsequent paragraphs elaborate on the information presented in the previous ones. Hence, the most important information comes first, with the least important information at the end. This format allows the editors to 'cut' the copy at any point after the first paragraph and still maintain the essential information (Breckon, et al., 1998).

Along with the program information, the writer's name, agency, and phone number are included in the upper left corner of the first page, with the date of release, or phrase 'for immediate release' in the upper right corner. Press releases are written on standard 8-1/2 by 11 inch paper, on one side only with pages numbered, and an indication of either 'more' or 'end' whichever is appropriate, at the bottom of each page.

Public Service Announcements (PSA) are the most commonly used format when working with radio and television. They are usually aired free of charge as part of a station's public service commitment. They are short, usually no more than 30 seconds, often less. Therefore, they must be carefully prepared, address only one behavioral objective, and target a specific segment of the population.

Following are guidelines to help in the preparation of PSAs:

- keep the message short and simple, no more than one or two key points
- provide new, accurate and complete information
- present information in a clear, concise manner
- use repetition of the subject
- if using television, superimpose the main point on the screen to reinforce the verbal message
- suggest specific behaviors
- develop and use a slogan
- use a credible spokesperson to deliver the message
- use positive, rather than negative, appeal
- use humor when appropriate and if it doesn't offend the audience
- be sure the message is relevant to the intended audience

(National Institutes of Health, 1983)

A fact sheet for distribution to the participating media representatives should be prepared for distribution at the conference, not before. The fact sheet should contain accurate statistical and descriptive information to allow reporters to develop their own stories (Breckon, et al., 1998).

D. FOSTER COMMUNICATION BETWEEN PROVIDERS AND CONSUMERS

Consumer Advocacy

Advocacy means to organize, speak out, act to influence policy and policy makers about health issues (Goodhart, 1999). The aim of advocacy is to create a shift in public opinion, funding, resources, to gain support for an issue, policy or constituency (Baukema, 1998).

In order to be an effective advocate it takes knowledge and planning.

To be knowledgeable, an advocate should:

- understand the history of the issue
- be aware of the political and public perception of the issue
- be able to explain past legislative action on the issue
- base the solution on political realities
- have a focused message
- be concise and informative

To plan, an advocate should:

- define the message so that it is "palatable" to the legislator
- meet with legislators in person
- take ample notes during meetings with legislators
- join with other groups advocating for the same issue

. (Crocco, 2000)



Advocacy does not have to be time consuming. All it takes is:

- 1 minute to leave a message for a legislator
- 3-5 minutes to copy and share an article with a colleague or legislator
- 5-10 minutes to send an e-mail or letter to a legislator
- 10-15 minutes to visit a website to get the latest information on advocacy issues
- 15-40 minutes to write a letter to the editor

The following are some advocacy sites to visit on the Web:

- <http://www.apha.org>
- <http://www.commoncause.org>
- <http://www.greenpeace.org>
- <http://www.lwv.org>
- <http://www.naral.org>
- <http://www.smartvote.org>



Provider Communications

Models of doctor-patient communication

Four models have been written about which exemplify communications between patients and their physicians (Emmanuel & Emmanuel, 1992; Veatch, 1991). Although different labels have been given to the four models, there is consistency in the description of each model.

The Paternalistic Model (also known as the Priestly Model). The physician determines the appropriate treatment and presents this information to the patient. The patient is expected to accept the physician's recommendations without question. In this model, the physician is viewed as the expert and is presumed to act as the guardian in the best interests of the patient. The autonomy of the patient is limited and consists of assenting to physician decisions made in those interests.

The Scientific Model (also known as the Informative or Engineering Model). The physician presents the patient with all medical information, and the full range of treatment options. With this information, the patient is expected to choose particular alternatives, and the physician is expected to honor those choices. In this model, the physician acts as a technical expert. The autonomy of the patient is preserved by having the patient make the actual medical decisions.

The Collegial Model (also known as the Interpretive Model). The role of the physician is a combination of presenting information relevant to the patient's condition, and helping the patient to make decisions about appropriate treatments. In this model, the physician acts as clinician and counselor. The autonomy of the patient is not compromised. The physician and patient engage in a collaborative decision-making process.

The Contractual Model (also known as the Deliberative Model). The role of the physician is to help the patient's decision-making process and empower the patient to act. In this model, the physician acts as a teacher. The patient takes an active role in considering health-related values in relation to appropriate treatment choices.

(Emmanuel & Emmanuel, 1992; Veatch, 1991)

NOTES

CODE OF ETHICS FOR THE HEALTH EDUCATION PROFESSION**PREAMBLE**

The Health Education profession is dedicated to excellence in the practice of promoting individual, family, organizational, and community health. Guided by common ideals, Health Educators are responsible for upholding the integrity and ethics of the profession as they face the daily challenges of making decisions. By acknowledging the value of diversity in society and embracing a cross-cultural approach, Health Educators support the worth, dignity, potential, and uniqueness of all people.

The Code of Ethics provides a framework of shared values within which Health Education is practiced. The Code of Ethics is grounded in fundamental ethical principles that underlie all health care services: respect for autonomy, promotion of social justice, active promotion of good, and avoidance of harm. The responsibility of each health educator is to aspire to the highest possible standards of conduct and to encourage the ethical behavior of all those with whom they work.

Regardless of job title, professional affiliation, work setting, or population served, Health Educators abide by these guidelines when making professional decisions.

Article 1: Responsibility to the Public

A Health Educator's ultimate responsibility is to educate people for the purpose of promoting, maintaining, and improving individual, family, and community health. When a conflict of issues arises among individuals, groups, organizations, agencies, or institutions, health educators must consider all issues and give priority to those that promote wellness and quality of living through principles of self-determination and freedom of choice for the individual.

Section 1: Health Educators support the right of individuals to make informed decisions regarding health, as long as such decisions pose no threat to the health of others.

Section 2: Health Educators encourage actions and social policies that support and facilitate the best balance of benefits over harm for all affected parties.

Section 3: Health Educators accurately communicate the potential benefits and consequences of the services and programs with which they are associated.

Section 4: Health Educators accept the responsibility to act on issues that can adversely affect the health of individuals, families, and communities.

Section 5: Health Educators are truthful about their qualifications and the limitations of their expertise and provide services consistent with their competencies.

Section 6: Health Educators protect the privacy and dignity of individuals.

Section 7: Health Educators actively involve individuals, groups, and communities in the entire educational process so that all aspects of the process are clearly understood by those who may be affected.

Section 8: Health Educators respect and acknowledge the rights of others to hold diverse values, attitudes, and opinions.

Section 9: Health Educators provide services equitably to all people.

Article II: Responsibility to the Profession

Health Educators are responsible for their professional behavior, for the reputation of their profession, and for promoting ethical conduct among their colleagues.

Section 1: Health Educators maintain, improve, and expand their professional competence through continued study and education; membership, participation, and leadership in professional organizations; and involvement in issues related to the health of the public.

Section 2: Health Educators model and encourage nondiscriminatory standards of behavior in their interactions with others.

Section 3: Health Educators encourage and accept responsible critical discourse to protect and enhance the profession.

Section 4: Health Educators contribute to the development of the profession by sharing the processes and outcomes of their work.

Section 5: Health Educators are aware of possible professional conflicts of interest, exercise integrity in conflict situations, and do not manipulate or violate the rights of others.

Section 6: Health Educators give appropriate recognition to others for their professional contributions and achievements.



Article III: Responsibility to Employers

Health Educators recognize the boundaries of their professional competence and are accountable for their professional activities and actions.

Section 1: Health Educators accurately represent their qualifications and the qualifications of others whom they recommend.

Section 2: Health Educators use appropriate standards, theories, and guidelines as criteria when carrying out their professional responsibilities.

Section 3: Health Educators accurately represent potential service and program outcomes to employers.

Section 4: Health Educators anticipate and disclose competing commitments, conflicts of interest, and endorsement of products.

Section 5: Health Educators openly communicate to employers, expectations of job-related assignments that conflict with their professional ethics.

Section 6: Health Educators maintain competence in their areas of professional practice.



Article IV: Responsibility in the Delivery of Health Education

Health Educators promote integrity in the delivery of Health Education. They respect the rights, dignity, confidentiality, and worth of all people by adapting strategies and methods to meet the needs of diverse populations and communities.

Section 1: Health Educators are sensitive to social and cultural diversity and are in accord with the law, when planning and implementing programs.

Section 2: Health Educators are informed of the latest advances in theory, research, and practice, and use strategies and methods that are grounded in and contribute to development of professional standards, theories, guidelines, statistics, and experience.

Section 3: Health Educators are committed to rigorous evaluation of both program effectiveness and the methods used to achieve results.

Section 4: Health Educators empower individuals to adopt healthy lifestyles through informed choice rather than by coercion or intimidation.

Section 5: Health Educators communicate the potential outcomes of proposed services, strategies, and pending decisions to all individuals who will be affected.



Article V: Responsibility in Research and Evaluation

Health Educators contribute to the health of the population and to the profession through research and evaluation activities. When planning and conducting research or evaluation, health educators do so in accordance with federal and state laws and regulations, organizational and institutional policies, and professional standards.

Section 1: Health Educators support principles and practices of research and evaluation that do no harm to individuals, groups, society, or the environment.

Section 2: Health Educators ensure that participation in research is voluntary and is based upon the informed consent of the participants.

Section 3: Health Educators respect the privacy, rights, and dignity of research participants, and honor commitments made to those participants.

Section 4: Health Educators treat all information obtained from participants as confidential unless otherwise required by law.

Section 5: Health Educators take credit, including authorship, only for work they have actually performed and give credit to the contributions of others.

Section 6: Health Educators who serve as research or evaluation consultants discuss their results only with those to whom they are providing service, unless maintaining such confidentiality would jeopardize the health or safety of others.

Section 7: Health Educators report the results of their research and evaluation objectively, accurately, and in a timely fashion.



Article VI: Responsibility in Professional Preparation

Those involved in the preparation and training of Health Educators have an obligation to accord learners the same respect and treatment given other groups by providing quality education that benefits the profession and the public.

Section 1: Health Educators select students for professional preparation programs based upon equal opportunity for all, and the individual's academic performance, abilities, and potential contribution to the profession and the public's health.

Section 2: Health Educators strive to make the educational environment and culture conducive to the health of all involved, and free from sexual harassment and all forms of discrimination.

Section 3: Health Educators involved in professional preparation and professional development engage in careful preparation; present material that is accurate, up-to-date, and timely; provide reasonable and timely feedback; state clear and reasonable expectations; and conduct fair assessments and evaluations of learners.

Section 4: Health Educators provide objective and accurate counseling to learners about career opportunities, development, and advancement, and assist learners to secure professional employment.

Section 5: Health Educators provide adequate supervision and meaningful opportunities for the professional development of learners.



Construction of the Health Education Specialist Certification Examination

(Adapted from E. Tyler, CHES Bulletin, Fall, 1995)

To implement a certification program, it is necessary to develop an examination that accurately measures practice-related knowledge and skills. The first step is to conduct a "role delineation." A role delineation is a careful description of the job duties, including the knowledge, and skills needed to perform these duties. That information is used in each step of the examination construction process, including the development of test specifications (content outline), construction of specific items (questions) to be included in the exam, and the composition of the examination. The certification examination and the entire certification process is based solely upon the competencies and sub-competencies of the Framework. Items (exam questions) are developed from the Framework.

Item development involves two processes: 1) the construction of the items and 2) the review of content. Items are solicited from practitioners in the field or in an item-writing workshop. Item writers are volunteers who must be CHES, represent an area of practice, and be aware of geographical variations in practice. The Professional Examination Service (PES), the testing agency which administers and scores the test, has developed item-writing principles that must be used in the development of the items.

Items submitted to PES are reviewed by consultants who are experts in the field. Items are reviewed by three subject matter specialists. The items that survive are placed in a computerized item bank for possible future use in an examination.

The NCHEC Division Board for the Certification of Health Education Specialists and a PES psychometrician participate in the exam construction workshop. During this workshop, a portion of the items previously developed that most clearly represent the test specifications are selected to be included in the first draft. The draft is reviewed by PES psychometricians and editors. These additional reviews enhance the quality and accuracy of the items in the exam.

A statistical procedure known as "equating" is used to establish the pass point. By using equating methods to link pass points across different forms of the exam, it assumes that the standard of performance applied to the test results will be functionally equivalent from year to year.

The development of the exam is a complex process. It takes more than a year to complete and requires the involvement and expertise of many.

Reference: National Commission for Health Education Credentialing, Inc. (1996). *A Competency-Based Framework for Professional Development of Certified Health Education Specialists*. Allentown, PA: Author.





The following are examples of the types of questions that might appear on a certification examination. These are not questions that have been used on past examinations, nor are they from the item bank used to create future examinations. These are simply practice questions to assist you in preparing for the examination.

Practice Questions

At the end of this section, you will find the best answers.

1. Healthy People 2010 categorizes U.S. health issues according to:
 - a) primary, secondary, and tertiary prevention.
 - b) stages of development and health problems from infants to elderly.
 - c) morbidity and disability in regions of the U.S.
 - d) health promotion, protection, and prevention.
2. Two communities have the same crude death rate (8.7 per 1000). Select the correct statement from the following:
 - a) Both communities will have similar age adjusted death rates.
 - b) If one community has more elderly people than the other, it should have a higher crude death rate.
 - c) Adding sex and age specific distributions would make it possible to study differences in the communities.
 - d) Both communities will have approximately equal numbers of Latino deaths.
3. Which one of the following techniques is the best example of secondary prevention?
 - a) Immunization
 - b) Mammography
 - c) Cardiac rehabilitation
 - d) Smoking cessation





4. The phrase "excess deaths" expresses the difference between the number of deaths observed in a group and the number expected if the death rates were similar to the general population. Based on the last several years of data, select the correct statement from the following:
 - a) Excess deaths due to unintentional injuries are lower for African-American males aged 18-25 years than for females aged 18-25 years.
 - b) Excess deaths for infant mortality among African-Americans is four times higher than for Caucasians.
 - c) Excess deaths of African-Americans occur mostly after age 65.
 - d) The major contributors to excess deaths for African-American males are cancer and infectious diseases.
5. The health educator is responsible for determining an intervention to deal with the absenteeism and alcoholism problems identified by a health risk assessment in a corporation. Which one of the following is the most appropriate program to address these problems?
 - a) A crisis intervention program
 - b) An employee assistance program
 - c) An Alcoholics Anonymous program
 - d) A stress management program
6. Which of the following illustrates an appropriately written goal statement?
 - a) Education in hand washing will be provided to all employees during the first week of employment.
 - b) Health education is important for all individuals regardless of their position in the company.
 - c) Insurance should eliminate pre-existing clauses and should facilitate reasonable access.
 - d) The employees will know the policy and procedures of appropriate hand washing.
7. A phrase or short statement that clearly describes the overall focus of a program is a/an:
 - a) mission statement.
 - b) goal.
 - c) motto.
 - d) objective.

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8. Which one of the following is the correct rank for unintentional injury as a cause for age-specific mortality for individuals 15-24 years of age in the United States in recent years?
- a) First
 - b) Second
 - c) Third
 - d) Fourth
9. Of the following, the disease that has caused the most deaths in United States residents aged 45-64 in recent years is:
- a) heart disease.
 - b) cancer.
 - c) diabetes.
 - d) stroke.
10. Which one of the following statistics is the most used in routinely comparing the health status of regions, states and countries?
- a) Neonatal death rate
 - b) Infant mortality rate
 - c) Fetal mortality rate
 - d) Perinatal mortality rate
11. The adult learner responds most readily to which of the following?
- a) Problem solving experiences
 - b) Traditional lectures
 - c) Role playing experiences
 - d) Self-study reading assignments
12. Which one of the following components in the Health Field Concept has the least impact on health status?
- a) Human biology
 - b) Environment
 - c) Quality of health care
 - d) Lifestyle behaviors
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13. According to the Surgeon General's Report, *Healthy People 2010*, which has the greatest potential for decreasing morbidity?
- a) Environment
 - b) Lifestyle behaviors
 - c) Human biology
 - d) Health care
14. "The gathering of information about the population under study, including general health status, health care, and social services system available," is a definition of which of the following?
- a) Community analysis
 - b) Needs assessment
 - c) Community diagnosis
 - d) Resource inventories
15. A hospital has contracted with the state health department to provide health services to a rural community. A group of new immigrants in the community has an outbreak of measles among their children. They resist immunization. The health educator's job is to develop an education and recruitment campaign quickly to forestall a serious epidemic. The educator has been unable to develop relationships with this target group beyond minimal contacts and does not have the time to build trust by systematic increments. From the following, select the best alternative step.
- a) Relate to and enlist groups that work with the target group.
 - b) Define the problem, identify an action, and identify a spokesperson within the target group.
 - c) Develop a database of epidemiological and other records.
 - d) Call the state health department for advice.
16. The health educator at the new hospital wants to evaluate any problems associated with initiation of a system for charting. This is what kind of evaluation?
- a) Formative evaluation
 - b) Process evaluation
 - c) Impact evaluation
 - d) Outcome evaluation
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17. Which of the following data collection methods typically has the lowest response rate?
- a) Telephone survey
 - b) Face to face survey
 - c) Mail survey
 - d) Small group interview
18. The technique of information gathering which is most likely to allow for participants to present their views impersonally and confidentially without overtly influencing the opinions of others is which of the following?
- a) Nominal group process
 - b) Focus group process
 - c) Delphi technique
 - d) Community forum
19. The first step in designing a survey is:
- a) determining the objectives.
 - b) determining the specific data to be collected.
 - c) defining the population.
 - d) determining the types of scales to be used.
20. Health educators' responsibilities to their employers, in terms of self-disclosure and professional conduct, are to:
- a) accept the expectations and work related assignments of the employer, without question.
 - b) keep their personal lives to themselves, and not share information about other commitments and possible conflicts of interest.
 - c) represent accurately their own qualifications and the qualifications of others that they recommend.
 - d) make statements about program outcomes as outlined by the employer.
21. Because the participants are selected according to specific criteria, the information obtained from which one of the following group processes is not generalizable?
- a) Community forum
 - b) Focus group
 - c) Face-to-face interviews
 - d) Delphi panel
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22. In the process of selecting the most appropriate educational method to use in a health education program, it is most important to do which of the following?
- a) Ensure that only one method is selected for implementation.
 - b) Recognize that the program location rarely affects method selection.
 - c) Consider the nature of the audience and the purpose of the program.
 - d) Realize that all methods are equally useful in any setting.
23. Which of the following data collection techniques is likely to give you useable information with minimal outlay of expense?
- a) Random household survey
 - b) Focus group interviews
 - c) Mailed, self-administered questionnaire
 - d) Telephone survey
24. Performance evaluation review technique (PERT) is:
- a) an evaluation model, particularly suited to qualitative data.
 - b) a planning method to set deadlines and schedules.
 - c) a management tool for projects which are not too complex.
 - d) a list of tasks and personnel assignments for a research project.
25. What are the 4 "P's" of marketing?
- a) Planning, production, perception and program
 - b) Product, price, place and promotion
 - c) Planning, population, promotion and programs
 - d) Permission, problems, planning and performance
26. Which of the following health information resources is rarely monitored or juried and, therefore, must be carefully monitored for possible bias?
- a) Information from Internet sites
 - b) Professional association newsletters
 - c) Health professional journal articles
 - d) Non-profit organization brochures
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27. A state health department project to increase breast self-examination in a group of older, low-income African American women did not seem to be effective. A focus group looked at "shower cards" that had been developed and said they were hard to read and understand and that they didn't identify with the woman in the picture who was too young and pretty and "didn't look like them." Which of the following would be the least likely to improve program effectiveness?
- a) Use a picture of an older African-American woman.
 - b) Make the cards larger so they would be easier to read.
 - c) Use fewer words on the cards.
 - d) Simplify the text by using shorter words.
28. Assessing the effectiveness of a program to reduce heart attacks by comparing baseline blood pressure control levels to follow-up survey measures would be an example of which of the following?
- a) A process evaluation
 - b) A formative evaluation
 - c) An impact evaluation
 - d) An outcome evaluation
29. Two major beliefs underlying the Health Belief Model are about:
- a) perceived seriousness and causal attribution.
 - b) susceptibility and benefits of treatment.
 - c) action and dissonance reduction.
 - d) adoption and maintenance of new behavior.
30. A recommendation that all members of a HMO should maintain blood pressure readings of 140/90 or below is an example of:
- a) a norm referenced measure.
 - b) a criterion referenced measure.
 - c) a medical standard.
 - d) a summative evaluation.
31. The adoption curve illustrates which of the following?
- a) The amount of time it takes to integrate a new idea within an ethnic group
 - b) The successive waves of use by groups with identifiable characteristics
 - c) The patterns of early adopters as healthier than late adopters
 - d) The effectiveness of mass media on multiple populations
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32. The first step in identifying a need for community health education programs should be to:
- a) conduct a community analysis.
 - b) assess existing individual behaviors.
 - c) establish program objectives.
 - d) determine the poverty level.
33. Within the PRECEDE-PROCEED planning tool, the phase during which causes for the identified problems are sought and a set of behavioral objectives developed is called:
- a) social diagnosis.
 - b) behavioral/environmental diagnosis.
 - c) educational diagnosis.
 - d) administrative/policy diagnosis.
34. Which of the following is essential for an individual's success in using self-control techniques to maintain a behavioral change?
- a) Independence from formal intervention
 - b) Intrinsic motivation and self-reliance
 - c) Ability to measure the behavioral change
 - d) Follow-up at regular intervals
35. The most accurate statement concerning the use of fear messages in education is that they are:
- a) ineffective and should not be used.
 - b) effective, if used moderately.
 - c) effective, if they include an action that will reduce the fear.
 - d) unpopular, but should still be used frequently.
36. The success of the coalition or collaborative entity will be fostered if:
- a) membership benefits are equalized and all contributions treated the same.
 - b) membership contributions to decision-making are encouraged.
 - c) members are encouraged to find neutral individuals for participation in activities.
 - d) members network only inside the coalition to prevent opposing ideas and movements.
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37. The first stage in organizing a coalition is:
- a) preformation.
 - b) identifying key members.
 - c) pre-planning.
 - d) needs analysis.
38. Program planning for a community health department begins with an assessment of existing:
- a) community health agencies.
 - b) local health department resources.
 - c) health needs, concerns, and assets.
 - d) health personnel resources.
39. The American Dental Association health education program includes the following objectives: the participants will adopt positive attitudes toward tooth brushing, will rate daily brushing as a highly important activity, and will demonstrate correct use of a tooth-brush. These are examples of:
- a) process objectives.
 - b) behavioral objectives.
 - c) outcome objectives.
 - d) impact objectives.
40. The best time to plan an evaluation is:
- a) when beginning the implementation phase.
 - b) when writing objectives for the overall program.
 - c) just as soon as the implementation phase is underway.
 - d) at least six (6) months before the program is completed.
41. Which of the following is the last phase in the development of a coalition?
- a) Maintenance
 - b) Performance
 - c) Implementation
 - d) Post-Formation
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42. When writing objectives it is important to remember that they:
- a) can have numerous indicators.
 - b) need to be clear, concise statements.
 - c) should include resource requirements.
 - d) do not need to be measurable.
43. The evaluation method that helps to identify the causes of a program's strengths or weaknesses, and also assesses need for modifications to improve the program is:
- a) process evaluation.
 - b) outcome evaluation.
 - c) impact evaluation.
 - d) needs evaluation.
44. Health educators are involved in program development for a smoking cessation class. When they develop implementation plans for the program, they are working on which of the following?
- a) Learning activities
 - b) Data management
 - c) Program protocols
 - d) Recruitment of participants
45. A health educator has been asked to write an opinion article on the benefits of a school-based teen pregnancy prevention program. Information would most likely be found in which one of the following resources?
- a) ERIC
 - b) MEDLINE
 - c) NHIC
 - d) Education Abstracts
46. The health educator wants to plan an effective program. Which of the following steps would be the first to take?
- a) Identify existing health needs, problems, and concerns.
 - b) Identify and recruit relevant people.
 - c) Select educational methods and locate resources.
 - d) Establish short and long-term objectives and goals.
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47. The first level of evaluation is:
- a) formative evaluation.
 - b) impact evaluation.
 - c) process evaluation.
 - d) outcome evaluation.
48. "Within 18 months, 65% of the target population women will obtain yearly pap smears" is an example of a/an:
- a) learning objective.
 - b) program objective.
 - c) behavioral objective.
 - d) outcome objective.
49. What would most likely be the primary responsibility of a health educator hired to educate the patient and family in the recovery post surgery in an acute care medical facility?
- a) Educate the physicians in communication skills.
 - b) Evaluate the opinions of other health educators.
 - c) Establish and document behavioral objectives.
 - d) Obtain effective teaching aids and brochures.
50. The first phase in the implementation process for an educational program is:
- a) gaining acceptance for the program.
 - b) developing plans for program activities.
 - c) establishing a system under which the program will run.
 - d) estimating resources needed.
51. What is the primary function of a summative evaluation?
- a) To assess fiscal gains or losses
 - b) To determine what adjustments should be made
 - c) To be used as a quality control mechanism
 - d) To determine if program objectives were met
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52. "Women can identify anatomical structures of the female genitalia" is an example of which kind of objective?
- a) Behavioral objective
 - b) Learning objective
 - c) Program objective
 - d) Outcome objective
53. The most effective approach to foster an individual responsibility for a positive lifestyle change is to:
- a) develop a personal behavioral contract.
 - b) schedule annual medical examinations.
 - c) provide brochures and videos about health topics.
 - d) require regular visits with a health practitioner.
54. Within the second stage of coalition formation, the task to be accomplished is:
- a) conducting needs assessment.
 - b) identifying community capacity and barriers.
 - c) defining the mission of the coalition.
 - d) identifying activities to achieve the goals.
55. Data that begin as descriptions about a program or its participants are considered:
- a) quantitative data.
 - b) qualitative data.
 - c) internally valid data.
 - d) implementation data.
56. "Within 5 years, cancer deaths from endometrial cancer will decrease by 25%" is an example of which kind of objective?
- a) Behavioral objective
 - b) Learning objective
 - c) Program objective
 - d) Outcome objective
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57. What is the most important evaluation component of a health promotion program aimed at lowering cholesterol?
- a) Educating participants about reducing fat consumption
 - b) Measuring blood cholesterol levels of all participants, before, during and after program
 - c) Demonstrating proper food selection and preparation
 - d) Having participants identify high and low cholesterol foods
58. What would the health educator, when developing a health brochure, do to ensure that the audience would be able to understand the message?
- a) Write messages at a 6th to 7th grade levels.
 - b) Organize the material from complex to simple.
 - c) Use the SMOG conversion chart.
 - d) Use large type and bold all paragraph headings.
59. A specific, measurable statement of what an educator wants to accomplish by a given time is called a(n):
- a) process objective.
 - b) behavioral objective.
 - c) program objective.
 - d) administrative objective.
60. Which of the following can tell health educators that employees are interested in a voluntary smoking cessation program?
- a) The attendance at an orientation meeting for stop smoking classes
 - b) The number of employees who smoke, according to a self-report survey
 - c) Response to an employer's interview
 - d) The advice of the health promotion planning committee
61. Which one of the following data sets is the most appropriate to use in determining the level of a community's health status?
- a) Social and political data
 - b) Vital statistics
 - c) Business and commerce data
 - d) Demographic profiles
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62. At the AIDS Task Force meeting, a business professional group member asks a specific question about how the virus works in the body. The health educator has recently read this information, but doesn't remember the details. The most professional response is to:
- a) tell the person what you remember, even if you're not 100% sure of the accuracy.
 - b) say "I have some material on that question that I can mail to you."
 - c) tell the person that the subject will be covered at the next session
 - d) tell the person that their concern is not necessary.
63. A health educator just starting a new health promotion program would want to work with which one of the following in the initial phases of planning?
- a) An established, local media health and medical journalist
 - b) A community based organization
 - c) The local health officials
 - d) A group of local doctors and nurses
64. The health educator has invited representatives of several organizations to a meeting to talk about health needs in a neighborhood that has a series of divisive issues. The educator would like to avoid a conclusion that represents the narrow point of view of few who speak loudly and may not reflect the whole community. What is the best way to ensure that community-wide views are represented?
- a) Add additional representatives and increase participation.
 - b) Label the committee as an ad hoc task force group so that its existence can be limited.
 - c) Supplement the proceedings with a community survey.
 - d) Try to keep the group as small as possible.
65. Cost-effectiveness is:
- a) the cheapest way to achieve the objective.
 - b) the cost of intervention relative to its impact.
 - c) a measure of cost of intervention, considering potential disadvantages.
 - d) the intervention that brings about the most positive change.
66. What is the first step in a behavioral diagnosis?
- a) Listing enabling factors
 - b) Identifying predisposing factors
 - c) Identifying the barriers to change
 - d) Selecting the health problem to be analyzed
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67. Asking participants in a blood pressure screening program to provide their reaction to the experience would be an example of:
- a) summative evaluation.
 - b) criterion referenced testing.
 - c) monitoring process.
 - d) formative evaluation.
68. "At the completion of the program, 70% of the students in the school district will improve their physical fitness by 25%." This is an example of what kind of objective or goal?
- a) An impact objective
 - b) An outcome objective
 - c) A goal statement
 - d) A process objective
69. Saying "Let the boss or an impartial expert decide" is an example of conflict resolution by:
- a) compromise.
 - b) problem-solving.
 - c) flight or avoidance.
 - d) fight or confrontation.
70. In the PRECEDE model, which of the factors in the educational diagnosis deals with the support functions of parents and/or health providers?
- a) Enabling
 - b) Reinforcing
 - c) Predisposing
 - d) Communicating
71. What type of evaluation is used to measure the effects of the target group intervention?
- a) Formative
 - b) Process
 - c) Summative
 - d) Critical
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72. Essentially, coalition building is based on:
- a) an organization's vested interests.
 - b) representativeness.
 - c) equity in sharing resources.
 - d) collaboration.
73. Which group is most influential in planning school health education content?
- a) Parents
 - b) Teachers
 - c) State legislators
 - d) School nurses
74. Which one of the following organizations asserts a primary responsibility for promoting international health?
- a) NIH
 - b) UNDP
 - c) International Red Cross
 - d) UNICEF
75. Within five years of the initiation of the program, the adults in Mohawk County will attain the national average of 1.8 dental visits per year. This is an example of:
- a) a behavioral objective.
 - b) a program objective.
 - c) a social marketing baseline measure.
 - d) an action and confirmation measure.
76. Which one of the following is a voluntary agency?
- a) American Dietetic Association
 - b) American Medical Association
 - c) American Hospital Association
 - d) American Cancer Society
77. Reciprocal determinism in Social Cognitive Theory posits:
- a) the continuing adaptation and change between the individual, the behavior, and the environment.
 - b) a stage of precontemplation before change.
 - c) the perception or belief in a person's ability to perform.
 - d) the occurrences independent of a person's action that makes the individual feel helpless.
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78. The health educator anticipates divisive advocacy at a meeting. For establishing issues or problems in priority order, the best meeting procedure is:
- a) close the meeting to media representatives.
 - b) use nominal group process.
 - c) apply parliamentary rules with a formal agenda.
 - d) divide into focus groups.
79. Within a target population, cultural differences initially should be considered during program:
- a) implementation
 - b) evaluation
 - c) planning
 - d) marketing
80. The health educator has been assigned to write a grant proposal on the prevention of violent and abusive behavior. Which one is the most appropriate database for initiating a literature search?
- a) ERIC
 - b) Psychlit
 - c) Medline
 - d) Medlars
81. If the researcher conducts a database search for information on harmful levels of certain chemicals in salt-water fish consumed in Florida, what combination of key words would provide the best access to the information needed?
- a) Florida, fish, ocean, eating
 - b) Ocean, fish, Florida, chemicals
 - c) Fish, chemicals, Florida, consumption
 - d) Morbidity, fishing industry, consumption, Florida
82. A SMOG test measures:
- a) impact of a visual image.
 - b) scope of information in a document.
 - c) reading level of a document.
 - d) environmental air quality.
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83. A health educator has decided to use the MATCH model. What does this stand for?
- a) Multilingual Access to Community Health
 - b) Multiple Agreements towards Continual Health
 - c) Multilevel Approach To Community Health
 - d) Maintenance Advancement towards Continual Health
84. The theoretical base or model offering a wide range of interventions for planning behavior changes is:
- a) Health Belief
 - b) Diffusion of Innovations
 - c) Social Cognitive Theory
 - d) Stages of Change
85. To help promote behavioral change in a specific homogenous population, the best strategy is to approach the:
- a) grass roots, general population.
 - b) target group.
 - c) legislative power brokers in the community.
 - d) community leaders.
86. The best role models for behavior and attitude change regarding teen pregnancy prevention are:
- a) school nurses.
 - b) peer counselors.
 - c) teachers who have worked in teen pregnancy prevention programs.
 - d) community volunteers.
87. A local hospital has hired a company to work with the staff on team building. Time schedules, fees, and written goals and objectives have been developed. This is an example of which of the following?
- a) Consultation
 - b) Informal consultation
 - c) Formal consultation
 - d) Required consultation
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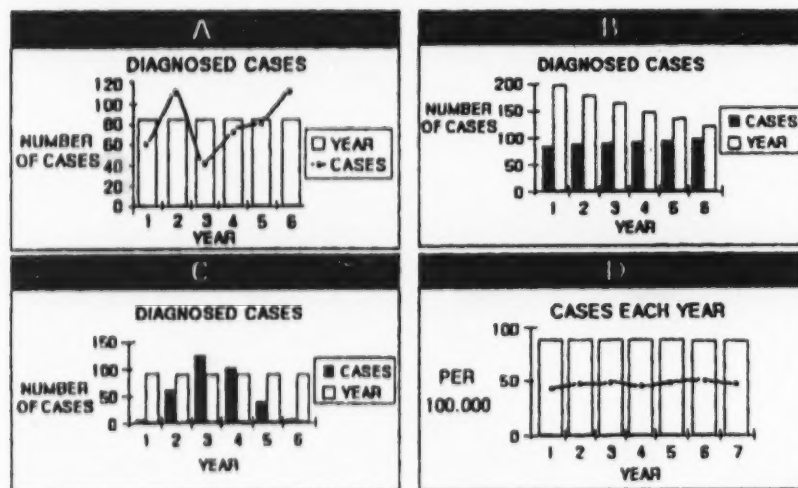
-
88. A local health department wants the health educator to help develop a school-based health clinic. The local school board is opposed. Which technique should be used to initiate a productive dialogue?
- a) Focus group
 - b) Force field analysis
 - c) Delphi approach
 - d) Nominal group process
89. Which one of the following is not one of the three major components of the comprehensive school health model?
- a) Healthful environment
 - b) Health education
 - c) Health administration
 - d) Health services
90. The perception of the constituency group in the Social Action Model of community organization is that they are:
- a) residents who are victims of the system.
 - b) citizens who can use self-help methods.
 - c) consumers who need facts.
 - d) early adapters of innovative strategies.
91. Aggregate Health Risk Assessment (HRA) data are used to:
- a) set health insurance rates.
 - b) plan programs specific to a workplace.
 - c) evaluate effectiveness of health promotion programs.
 - d) determine health promotion cost effectiveness.
92. At a large corporate headquarters office building, a health educator has been hired to oversee and implement an exercise program for employees. Of the following activities, this educator would most likely be least responsible for:
- a) assessing employee preferences for types of exercise programs.
 - b) educating the individuals on the benefits of physical fitness.
 - c) handling money and payments from the participants involved.
 - d) designing the exercise program.
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93. Most health-related voluntary agencies are established and based on:
- a) a priority stated in Healthy People 2010.
 - b) a single major health problem or a body organ.
 - c) a state law or mandate.
 - d) a service delivery concern.
94. A work-site health promotion planning committee will be most effective if it:
- a) has financial support from management.
 - b) reflects the diversity of employees in the company.
 - c) is allowed to meet on company time.
 - d) has limited responsibilities.
95. Which one of the following is the first of six sequential stages in the Marketing Process?
- a) Needs assessment
 - b) Market analysis
 - c) Needs modification
 - d) Market calibration
96. This association is part of a larger group, which comprises more than 43,000 professionals in sports, dance, and safety education. Which association is this?
- a) APHA
 - b) ACHA
 - c) AAHE
 - d) ASHA
97. The health educator is meeting with Mr. Jones to prepare him for his impending surgery. They discussed the benefits and the nature and purpose of the surgery, as well as possible untoward or negative effects. This process is called:
- a) informed consent.
 - b) needs assessment.
 - c) behavioral goals.
 - d) planned tactics.
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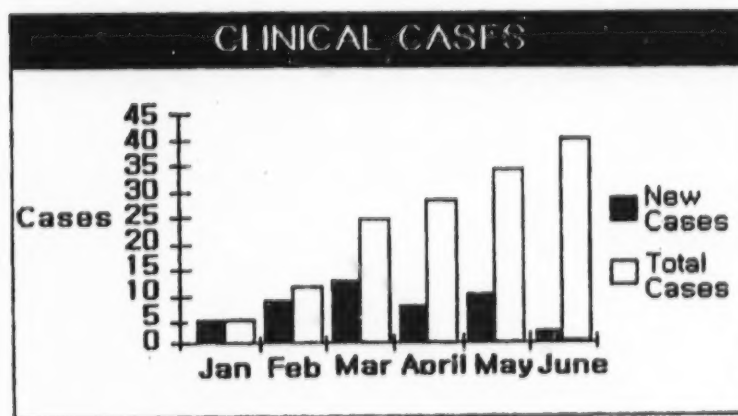
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98. The best demographic predictor for individual success in community based health education programs is:
- a) ethnicity.
 - b) education.
 - c) age.
 - d) gender.
99. The health communication system, developed by the National Cancer Institute, has six stages. The organization has just assessed the effectiveness, which was based on the objectives in the first stage. What stage follows?
- a) Implementation
 - b) Feedback to refine program
 - c) Selecting channels and materials
 - d) Planning and strategy selection
100. Which one of the following rates provides the number of live births in a population of women aged 15-44 years?
- a) Crude birth rate
 - b) General natality rate
 - c) General fertility rate
 - d) Population natality rate
101. The concept that individuals are likely to engage in health promoting actions when they perceive their identified risk as serious and that they are personally susceptible, is a basic assumption of the:
- a) PRECEDE/PROCEED Model.
 - b) Self-Help Model.
 - c) Health Belief Model.
 - d) Cognitive Action Model.
102. Individual HRA data summaries can be used to:
- a) determine health promotion cost effectiveness.
 - b) set health insurance rates.
 - c) counsel employees on lifestyle change.
 - d) evaluate effectiveness of health promotion programs.
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103. Health educators are designing an evaluation to use with a free-standing pregnant minor program in a local high school. Due to the limited number of participants and no control group, they would utilize a (an):
- a) quasi-experimental design.
 - b) experimental design.
 - c) quantitative design.
 - d) non-experimental design.
104. A temporary group of individuals representing different organizations is termed a:
- a) negotiation team.
 - b) coalition.
 - c) collaboratory council.
 - d) conflict management review board.
105. Which one of the following systems was developed to create a mechanism through which effective community health education could occur?
- a) Planned Approach To Community Health
 - b) Health Promotion for Healthy Communities
 - c) Global Approaches to Community Health
 - d) Creative Ideas in Health Promotion
106. Health educators repeatedly employ which of the following techniques to change health behavior?
- a) Advocacy skills
 - b) Persuasive communication
 - c) Ethical conduct and inquiry
 - d) Group dynamic strategies
107. When developing mass media printed materials, the most important guideline to remember is to:
- a) use phrases and words that will stretch the minds of the audience.
 - b) use a reading level which is appropriate for the audience.
 - c) start with the most complex information first and then progress to more simple information.
 - d) use numerous bright and flashy graphics as this will be eye pleasing to the reader.
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108. The combination of entertainment and education to bring about a positive change in attitude is termed:
- enter-education.
 - media services.
 - marketing edutainment.
 - advertisements.
109. Which one of the graphs below (A, B, C, or D) could reflect a measles epidemic?
- A
 - B
 - C
 - D
110. Which one of the following graphs (A, B, C or D) could reflect endemic rabies in a community?
- A
 - B
 - C
 - D



111. A health clinic has generated the data report of 113 clinical cases shown in the graph below. The clinic director has asked the health educator to develop an appropriate education program to address this situation. What would be the best initial approach to this request?
- a) Assure him/her that you will put it in the budget request for next year.
 - b) Secure epidemiological and target group data to find out whether this is an episodic chance occurrence or a new trend.
 - c) Gather data to identify the existence of a behavioral component in the problem.
 - d) Begin to develop an educational program, as requested.
112. The same graph also indicates infections among a cohort of women and shows the monthly number of new cases of a diagnosed asymptomatic infection and the cumulative number of cases at the end of 6 months. Pick the correct statement from the following:
- a) The incidence is higher every month.
 - b) The prevalence is variable every month.
 - c) The infectious cases identified show that they have been cured within ten days of diagnosis.
 - d) The prevalence has risen steadily each month.



ANSWERS TO QUESTIONS

1. d	29. b	57. b	85. b
2. b	30. b	58. c	86. b
3. b	31. b	59. c	87. c
4. b	32. a	60. a	88. b
5. b	33. b	61. b	89. c
6. a	34. b	62. b	90. a
7. a	35. c	63. b	91. b
8. a	36. b	64. c	92. c
9. b	37. a	65. b	93. b
10. b	38. c	66. b	94. b
11. a	39. b	67. d	95. b
12. c	40. b	68. a	96. c
13. b	41. a	69. c	97. a
14. a	42. b	70. b	98. b
15. a	43. a	71. c	99. b
16. a	44. a	72. d	100. c
17. c	45. a	73. b	101. c
18. c	46. a	74. d	102. c
19. a	47. c	75. b	103. d
20. c	48. d	76. d	104. b
21. b	49. c	77. a	105. a
22. c	50. a	78. b	106. b
23. b	51. d	79. c	107. b
24. b	52. b	80. b	108. a
25. b	53. a	81. b	109. c
26. a	54. c	82. c	110. d
27. b	55. b	83. c	111. c
28. c	56. d	84. c	112. d

NOTES

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